

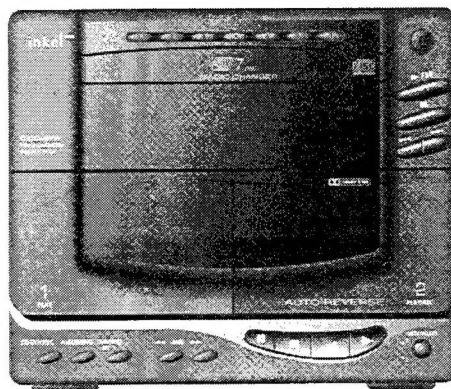
SERVICE MANUAL

P-676



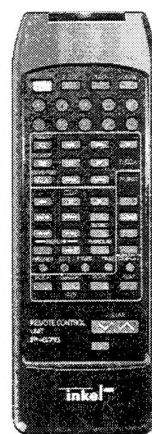
ATX-676

- STEREO INTEGRATED AMPLIFIER
- STEREO AM/FM TUNER & TIMER



CCD-676

- MULTI COMPACT DISC PLAYER
(7 CD Changer)
- STEREO DOUBLE CASSETTE DECK



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ATX-676

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CCD-676

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SAFETY PRECAUTION

WARNING

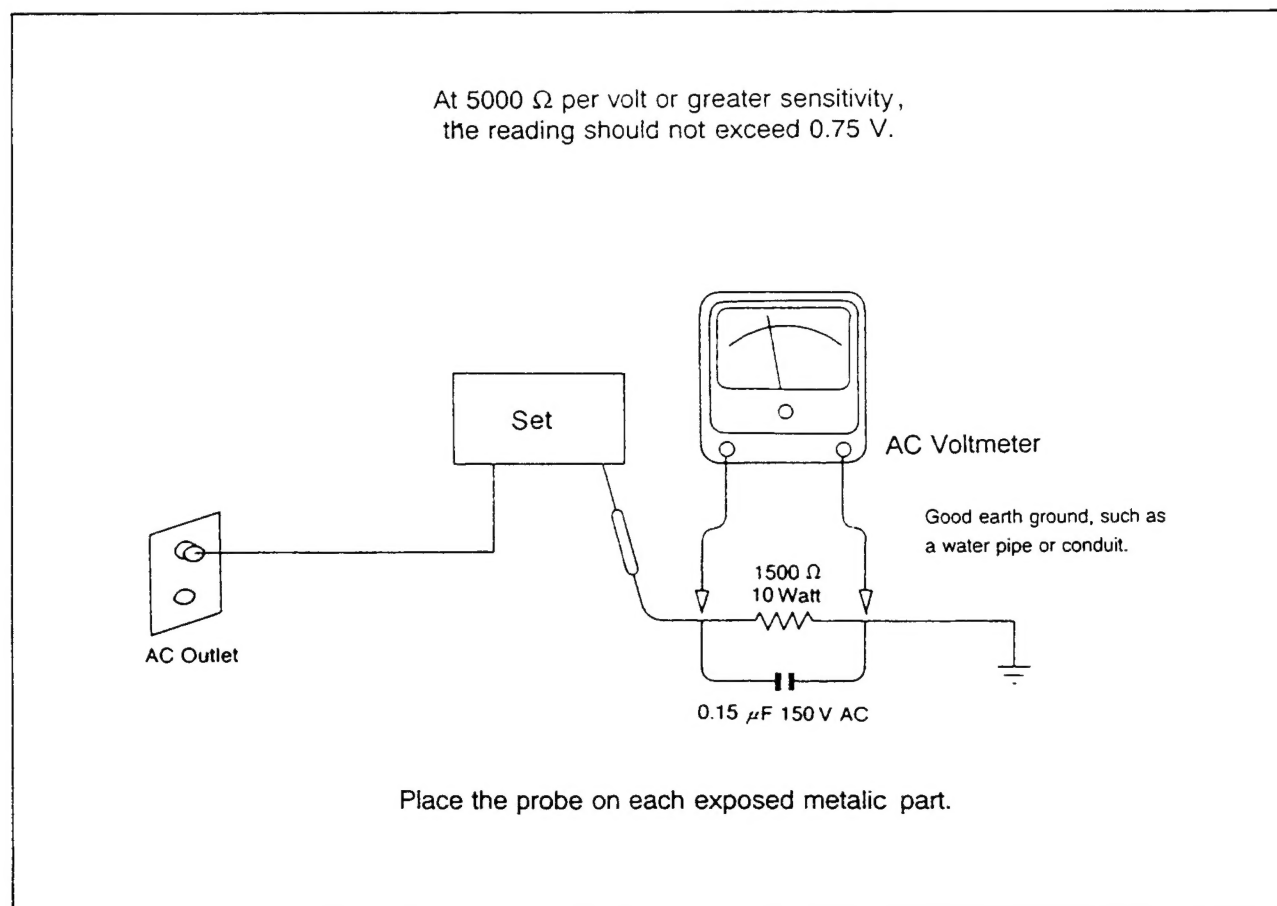
Before servicing this unit, familiarize yourself with the following precautions:

1. Many electrical and mechanical parts in this chassis have special safety characteristics that often pass unnoticed and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts that have these special safety characteristics are identified in this manual and its supplements: electrical components having such features are identified by Δ in the schematic diagram and the parts list.

Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

2. Before returning the set to the customer, always do an AC leakage current check on the

exposed metal parts of the cabinet, such as terminals, screw heads, and metal overlays, to be sure the set is safe to operate danger of electrical shock. Plug the AC line cord directly into a 120 V AC outlet (120 V AC version only). (Do not use a line isolation transformer during this check.) Be sure your AC voltmeter has a sensitivity of 5000Ω per volt or greater. Then connect a 1500Ω 10 watt resistor, paralleled by a $0.15 \mu\text{F}$ 150 V AC capacitor, between a known good earth ground (such as a water pipe, or conduit) and the exposed metallic is parts, one at a time. Measure the AC voltage across the combination of a 1500Ω resistor and a $0.15 \mu\text{F}$ capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed 0.75V RMS. This corresponds to 0.2 mA AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.



ATX-676

SPECIFICATIONS

🔊 AMPLIFIER SECTION

Description		Unit	Nominal	Limit	Condition
RMS Output Power <Stereo Mode>		W	57	53	6 Ω Load, THD \leq 0.8%, 1 kHz
Total Harmonic Distortion		%	0.1	0.3	1 kHz, 50 W Output, Stereo Mode
Inter Modulation Distortion		%	0.1	0.3	50 W Output, Stereo Mode
Input Sensitivity	AUX	mV	250	± 30	50 W Output, Stereo Mode
	MIC	mV	2.5	± 0.5	
Signal to Noise Ratio	AUX	dB	90	85	IHF WTD, 50 W Output
	MIC	dB	42	38	Input 4.7 K Ω Shorted
Frequency Response (at -3 dB Down)		Hz	10 ~ 75000	20 ~ 70000	AUX Input, 6 Ω Load 1 W Output
Channel Separation	1 kHz	dB	55	50	Vol. Max. 50 W = 0 dB
Minimum Noise		mV	0.7	1	Vol. Min., Speaker Output

🔊 EQ SECTION

- Ref. EQ FLAT

EQ	POPS	ROCK	CLASSIC	Unit	Nominal	Limit	Condition
100 Hz	0	3.75	2	dB	± 1	± 2	1 W Output
1 kHz	3.75	0	0	dB	± 1	± 2	1 W Output
10 kHz	2	2	2	dB	± 1	± 2	1 W Output

🔊 AM SECTION

AM Performance test Standard

- RF Signal: 999 kHz, 5 mV/m
- Modulation: 400 Hz, 30% at VOLUME 31 POINT (OUTPUT LEVEL ; 28 POINT)
- Test Condition: 30% DEV. at 400 Hz • EQ FLAT • SURROUND OFF • X-BASS OFF

Description			Unit	Nominal	Limit	Condition
Tuning Range		MW	kHz	520~1710		Step: 10 kHz, USA/Canada
		MW	kHz	522~1611		Step: 9 kHz, Korea, PT INDO, Europe
		LW	kHz	153~279		Step: 9 kHz, Europe
Usable Sensitivity (S/N=20 dB)		MW-2Band	uV/m	1000	1500	MW: 603 kHz, 999 kHz, 1404 kHz
		MW-3Band	uV/m	1000	1500	MW: 603 kHz, 999 kHz, 1404 kHz
		LW	uV/m	1500	2000	LW: 162 kHz, 207 kHz, 252 kHz
Image Rejection			dB	25	20	1404 kHz
IF Rejection			dB	40	35	603 kHz
AGC Figure of Merit			dB	45	40	From 100 mV/m at 999 kHz
Audio Response			Hz~kHz	100~2.2	120~2	999 kHz, -6 dB
Selectivity			dB	25	20	500 uV/m, 999 kHz ± 9 kHz
Signal to Noise Ratio		2Band	dB	40	35	999 kHz
		3Band	dB	35	30	
RF Overload THD			%	10	15	80% MOD., 100 mV/m Input
Whistle	3mV/m	2IF, 3IF	%	10	20	
	5mV/m	2IF, 3IF	%	10	20	
Output Voltage	Ref.:790 mV		mV	± 80	± 60	400Hz, 5 mV, 30% MOD, Volume Level 28

FM SECTION

FM Performance Test Standard

· EQ FLAT

· SURROUND OFF

· X-BASS OFF

Tuning Range : 87.5 MHz - 107.9 MHz Area	Tuning Range : 87.5 MHz - 108 MHz Area
RF Signal : 98.1 MHz	RF Signal : 98.0 MHz
Modulation : Mono ± 75 kHz DEV. for 1 kHz	Modulation : Mono ± 40 kHz DEV. for 1 kHz
Stereo ± 75 kHz, L=-R	Stereo ± 40 kHz, L=-R

Description			Unit	Nominal	Limit	Condition
Tuning range			MHz	87.5~107.9		Korea, USA/Canada Step: 200 kHz
			MHz	87.5~108		Europe, PT INDO, Step: 50 kHz
Usable Sensitivity			uV	2.5	4	90.1/98.1/106.1 MHz, 30 dB ≤ S/N
			uV	2.5	4	90/98/106 MHz, 26 dB ≤ SN
Image Rejection			dB	35	30	106/106.1 MHz
IF Rejection			dB	80	70	90/90.1 MHz
Full Limiting			uV	2	4	-3 dB, 75 Ω
50 dB Quieting Sensitivity	Mono	75 kHz DEV.	uV	5	8	IHF B.P.F, 75 dB
		40 kHz DEV.	uV	5	8	
	Stereo	75 kHz DEV.	uV	5	8	
		40 kHz DEV.	uV	70	80	
Total Harmonic Distortion	Mono	75 kHz DEV.	%	1	1.5	IHF B.P.F, 1 kHz, 100 % MOD.
		40 kHz DEV.	%	1	1.5	
	Stereo	75 kHz DEV.	%	1.5	2	
		40 kHz DEV.	%	1.5	2	
Signal to Noise Ratio	Mono	75 kHz DEV.	dB	60	55	IHF B.P.F, 100 % MOD., 1 mV Input
		40 kHz DEV.	dB	60	55	
	Stereo	75 kHz DEV.	dB	58	54	
		40 kHz DEV.	dB	58	54	
Audio Response at -3 dB			Hz~kHz	45~14	50~13.5	98/98.1 MHz, 100% MOD., 1 mV Input
AM Rejection Ratio			dB	40	30	100 uV ~ 20 mV Input
Search Level			uV	10	± 6 dB	75 Ω
Automatic Stereo Threshold			uV	10	± 6 dB	75 Ω
Muting Threshold			uV	10	± 6 dB	75 Ω
Overload THD			%	1	1.5	100% MOD., 100 mV RF Input
Spurious Response			dB	60	50	ANT. Input 2 uV 1/2IF, IF
Capture Ratio				2	3	40/60 dBu
Stereo Separation	100 Hz	dB	25	20	100% MOD., 1 mV Input, IHF B.P.F	
	1 kHz	dB	25	20		
	10 kHz	dB	25	20		
Output Voltage			Mono	± 400	± 700	1 kHz, 5 mV Input, 100% MOD, Volume Level 28
Ref.: 2100						

GENERAL

POWER CONSUMPTION (ATX-676 + CCD-676)

DIMENSIONS (W \times H \times D)

WEIGHT (Net), (ATX676 + CCD676)

POWER SUPPLIES

D, KS, PT INDO: 240 W

ATX-676: 245 \times 200 \times 280 mm

CCD-676: 245 \times 200 \times 280 mm

15 kg

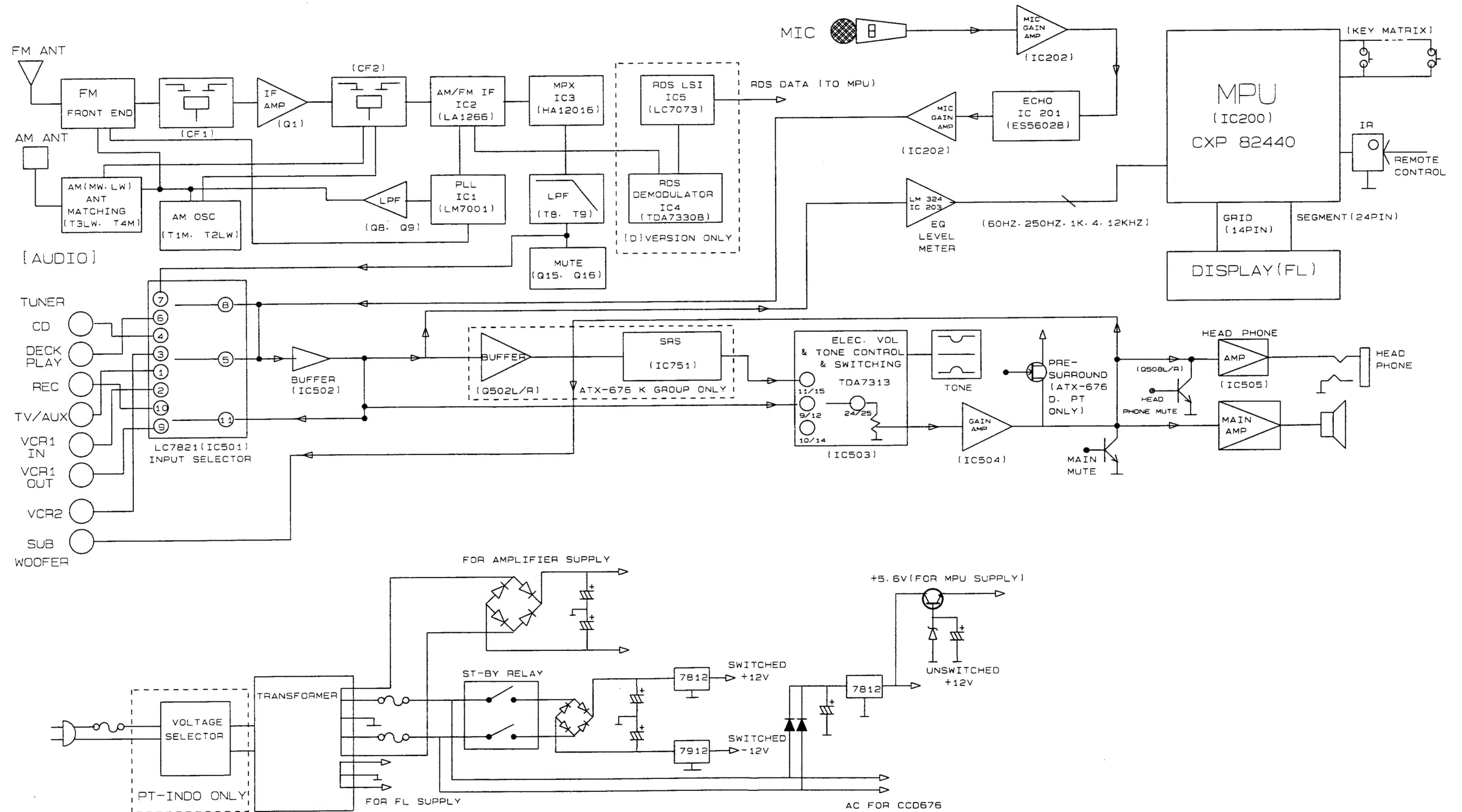
D: AC 230 V, 50 Hz (Europe Area)

KS: AC 220 V, 60 Hz (Korea Area)

PT INDO: AC 110/220 V, 50/60 Hz (multi voltage Area)

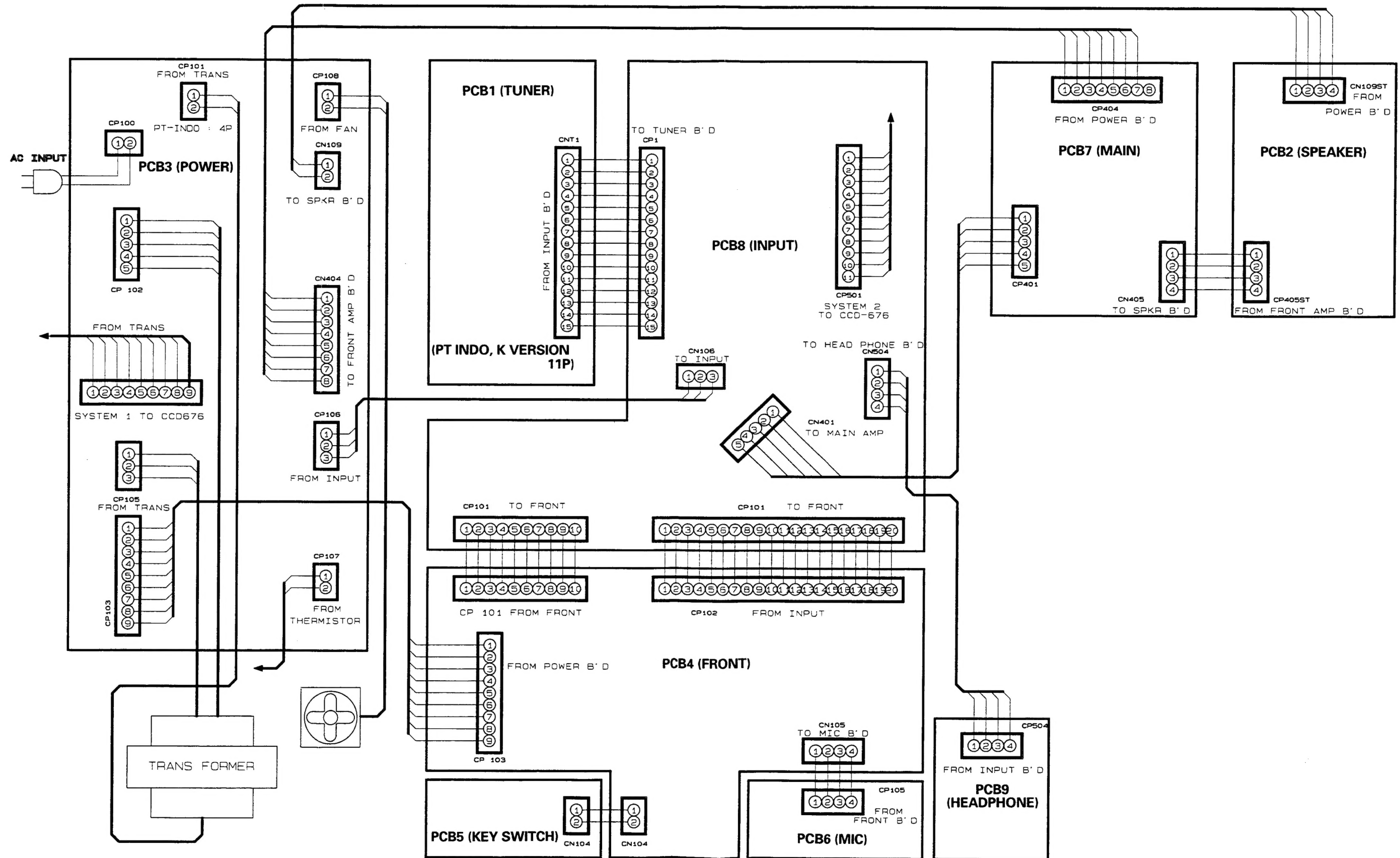
BLOCK DIAGRAM

Model No. : ATX-676



WIRING DIAGRAM

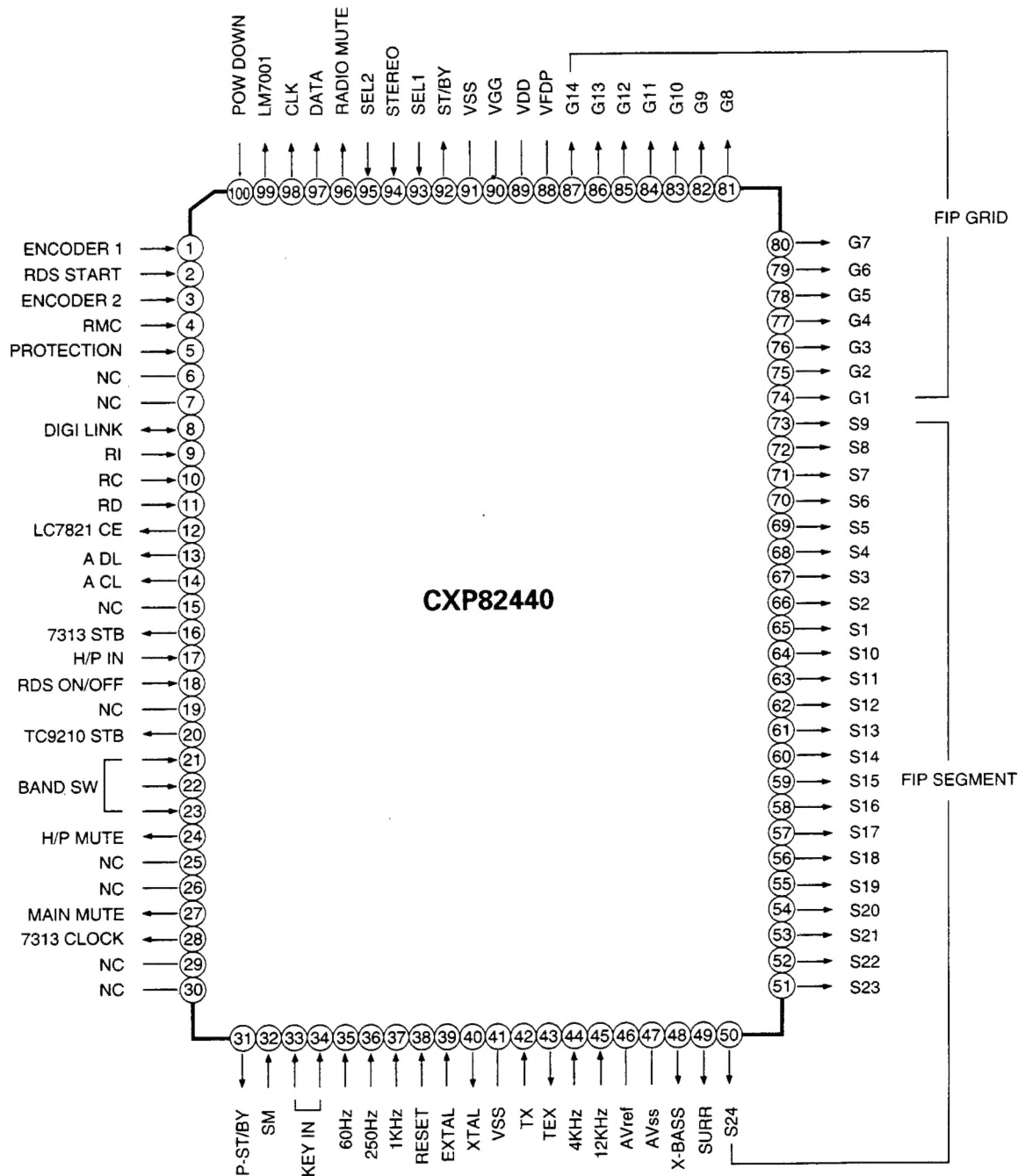
Model No. : ATX-676



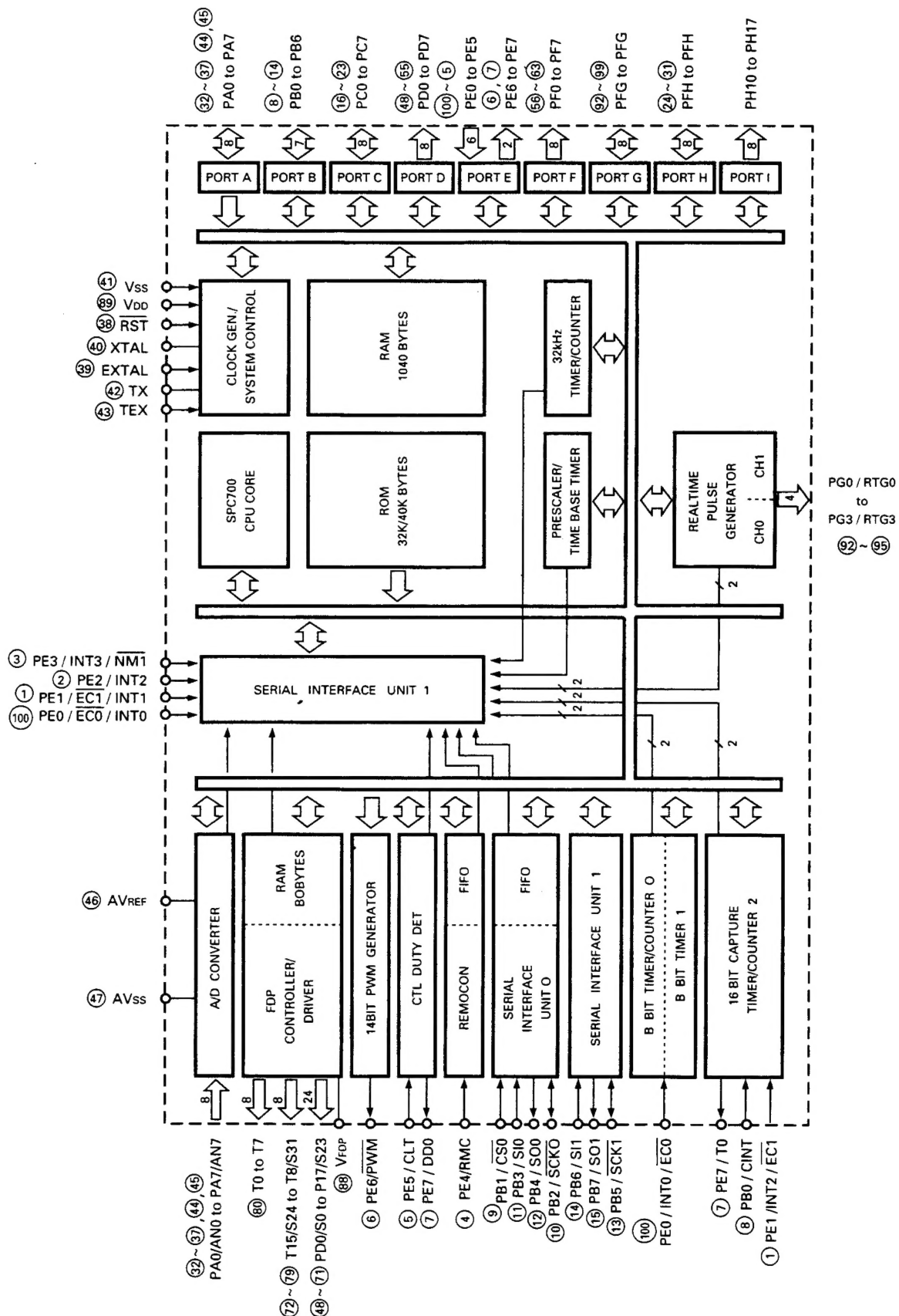
CIRCUIT DESCRIPTION

IC200 : CXP82440

1. Pin Configuration



2. Block Diagram



3. Input and Output terminal Functions

Pin No.	Symbol	Description																																																							
1/3	ENCODER 1/2	Signal input to decrease or increase volume by volume encoder.																																																							
2	RDS START	Input for LC7073 (pin14) data start.																																																							
4	RMC	Input for remote control signal.(At "L", it is active)																																																							
5	PROTECTION	Signal input for protection. If it is low, all channel mute signal levels are turned to high protect speakers and this unit. At abnormal condition, after 3 seconds elapses, it does check protection.																																																							
6/7	NC	Not used !																																																							
8	DIGI LINK	Input/Output for controlling digi-link.																																																							
9	RI	Input signal from TDA7330B (pin15) for ARI indication.																																																							
10	RC	Clock signal input from LC7073 (pin16).																																																							
11	RD	Data signal input from LC7073 (pin15).																																																							
12	LC7821 CE	Chip enable output for LC7821.																																																							
13	A DI	Data output for NJU9702, NJU1102 and LC7821.																																																							
14	A CL	Clock output for NJU9702, NJU1102 and LC7821.																																																							
15	NC	Not used !																																																							
16	7313 STB	Chip enable output for TDA7313.																																																							
17	H/P IN	Input for detecting headphone. When headphone is plugged or unplugged, input is high or low level.																																																							
18	RDS ON/OFF	Input for RDS on or off. (RDS on: "H", RDS off: "L")																																																							
19	NJU1102/9702 CE	Chip enable output for NJU1102 and NJM9702.																																																							
20	TC9210 STB	Chip enable output for TC9210.																																																							
21~23	BAND S/W	According to region, input for selecting the frequency band and the steps of FM and AM. Setting are as follows. <table><tr><th>Region</th><th>Frequency Band</th><th>Step</th><th>Pin 21</th><th>Pin 22</th><th>Pin 23</th></tr><tr><td rowspan="2">USA/Canada</td><td>FM: 87.5 ~ 107.9 MHz</td><td>200 kHz</td><td>L</td><td>H</td><td>L</td></tr><tr><td>AM: 520 ~ 1710 kHz</td><td>10 kHz</td><td></td><td></td><td></td></tr><tr><td rowspan="3">Europe</td><td>FM: 87.5 ~ 108 MHz</td><td>50 kHz</td><td></td><td></td><td></td></tr><tr><td>AM: 522 ~ 1611 kHz</td><td>9 kHz</td><td>L</td><td>L</td><td>L</td></tr><tr><td>153 ~ 279 kHz</td><td>9 kHz</td><td></td><td></td><td></td></tr><tr><td rowspan="2">Korea</td><td>FM: 87.5 ~ 107.5 MHz</td><td>200 kHz</td><td>H</td><td>H</td><td>L</td></tr><tr><td>AM: 522 ~ 1611 kHz</td><td>9 kHz</td><td></td><td></td><td></td></tr><tr><td rowspan="2">PT INDO</td><td>FM: 87.5 ~ 108 MHz</td><td>50 kHz</td><td>H</td><td>L</td><td>L</td></tr><tr><td>AM: 522 ~ 1611 kHz</td><td>9 kHz</td><td></td><td></td><td></td></tr></table>	Region	Frequency Band	Step	Pin 21	Pin 22	Pin 23	USA/Canada	FM: 87.5 ~ 107.9 MHz	200 kHz	L	H	L	AM: 520 ~ 1710 kHz	10 kHz				Europe	FM: 87.5 ~ 108 MHz	50 kHz				AM: 522 ~ 1611 kHz	9 kHz	L	L	L	153 ~ 279 kHz	9 kHz				Korea	FM: 87.5 ~ 107.5 MHz	200 kHz	H	H	L	AM: 522 ~ 1611 kHz	9 kHz				PT INDO	FM: 87.5 ~ 108 MHz	50 kHz	H	L	L	AM: 522 ~ 1611 kHz	9 kHz			
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PT INDO	FM: 87.5 ~ 108 MHz	50 kHz	H	L	L																																																				
	AM: 522 ~ 1611 kHz	9 kHz																																																							
24	H/P MUTE	Output for headphone mute. Output, high level under the following conditions. 1. When power is tuned on or off. 2. When headphone plug is inserted. 3. When "-∞ mute signal" is received from the commander. 4. When function is changed.																																																							

Pin No.	Symbol	Description
25	NC	Not used !
26	NC	Not used !
27	MAIN MUTE	Output for left and right channels mute. Output, low level under the following conditions. 1. When power is tuned on or off. 2. When headphone plug is inserted. 3. When "-∞ mute signal" is received from the commander. 4. When function is changed.
28	7313 CLOCK	Clock output for TDA7313.
29/30	NC	Not used !
31	P-ST/BY	Signal output for stand-by mute. At abnormal condition, after 3 seconds elapses, it does check protection.
32	SM	Input to detect the signal strength of RDS station.
33/34	KEY IN	Input data for key scan.
35	60 Hz	Input for controlling the level display at 60 Hz.
36	250 Hz	Input for controlling the level display at 250 Hz.
37	1 kHz	Input for controlling the level display at 1 kHz.
38	RESET	Input to reset u-com.
39/40	EXTAL/XTAL	Input/Output for crystal oscillator.
41	Vss	Ground
42/43	TX/TEX	Input/Output for crystal oscillator.
44	4 kHz	Input for controlling the level display at 4 kHz.
45	12 kHz	Input for controlling the level display at 12 kHz.
46	AVref	Reference voltage
47	AVss	This pin provides the analog ground potential.
48	X-BASS	Output to light up X-BASS LED. At "x-bass on", "H" and at "x-bass off", "L".
49	SURR	Output to light up SURROUND LED. At "surround on", "H" and at "surround off", "L".
50 ~ 73	S24 ~ S10, S1 ~ S9	Output for FIP segment.
74 ~ 87	G1 ~ G14	Output for FIP grid.
88	V _{FDP}	-30V power supply for FIP.
89	VDD	+5V power supply.
90	VGG	This pin should be connected to VDD during operation.
91	Vss	This pin provides the ground potential.
92	ST/BY	When the power is on, control data output is "H". When the power is off, control data output is "L" and last memory function is activated.

Pin No.	Symbol	Description			
93/95	SEL1/SEL2	Input for selecting surround mode.			
			DOLBY PROLOGIC	SRS	PRE SURROUND
		SEL 1	L	L	H
		SEL 2	H	L	L
94	STEREO	Input for lighting the STERO indicator.(At "L", it is active)			
96	RADIO MUTE	Output for tuner mute.(At "H", it is active)			
97/98	DATA/CLK	Clock/Data output for LM7001.			
99	LM7001	Chip enable output for LM7001.			
100	POW DOWN	Input for power down.(At "L", it is active)			

ALIGNMENT PROCEDURES

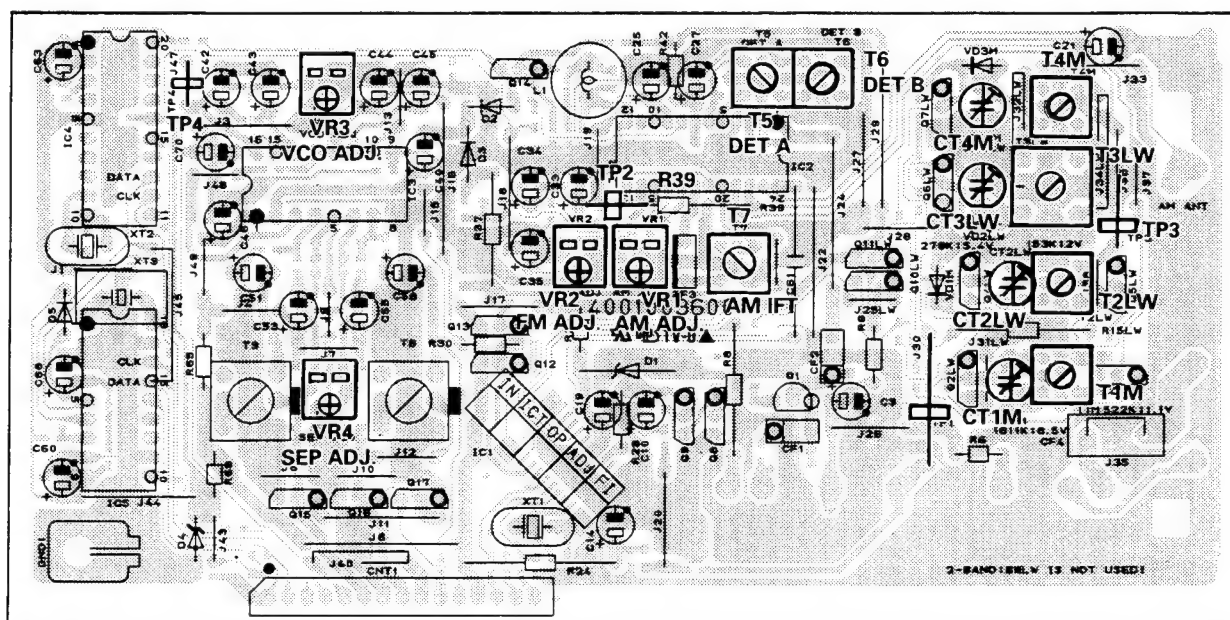
TUNER

1. Equipment Required

- AM Standard Signal Generator (AM SSG)
- Oscilloscope
- AC Voltmeter
- FM Standard Signal Generator (FM SSG)
- Stereo Modulator
- Audio Generator
- Distortion Meter
- DC Voltmeter
- Frequency Counter

Note : Disconnect external FM antenna prior to alignment.

2. Alignment and Test Point



3. AM Alignment

- Output of signal generator should not be greater than necessary to obtain an optimum output reading.
- Signal generator modulation : 30 %
- RF signal frequency : 400 Hz
- Switch : Press the BAND button to AM

Step	Subject	Signal Generator Frequency	Set Frequency Setting	Equipment Connection	Adjustment Point	Adjust for
1	Tuning Voltage	520 kHz (522 kHz)	520 kHz 1) (522 kHz)	DC Volt meter to J30(TP1)	T1M	DC 1.1 ± 0.2 V
		1710 kHz (1611 kHz)	1710 kHz 2) (1611 kHz)		CT1M	DC 8.5 ± 0.2 V
		* Repeat the step 1) and 2) until the DC voltmeter reads the tuning voltage metioned above.				
2	RF Tuning	600 kHz (594 kHz)	600 kHz 1) (594 kHz)	AC voltmeter and oscilloscope to speaker terminal of L or R channel	T4M	Maximize audio output
		1400 kHz (1404 kHz)	1400 kHz 2) (1404 kHz)		CT4M	
		* Feed signal should be fed to loop antenna through the test loop antenna 60 cm distant from the appliance.				
* Repeat the step 1) and 2) until no further improvement occurs.						

3	IF	1000 kHz (999 kHz)	1000 kHz (999 kHz)	IF genescope to speaker terminal of L or R channel	T7 AM IFT	Symmetrical curve on AM IF genescope
4	Tuned Level	1000 kHz (999 kHz) 800 μ V/m	1000 kHz (999 kHz)		VR1	"Tuned" flag in the FL display light on

4. LW Alignment

- Switch : Press the BAND button to LW

Step	Subject	Signal Generator Frequency	Set Frequency Setting	Equipment Connection	Adjustment Point	Adjust for
1	Tuning Voltage	153 kHz	153 kHz 1)	DC Volt meter to J30(TP1)	T2LW LW OSC(A)	DC 2 ± 0.2 V
		279 kHz	279 kHz 2)		CT2LM	DC 5.4 ± 0.3 V
		* Repeat the step 1) and 2) until the DC voltmeter reads the tuning voltage metioned above.				
2	RF Tuning	162 kHz	162 kHz 1)	AC voltmeter and oscilloscope to speaker terminal of L or R channel	T3LW LW ANT(B)	Maximize audio output
		252 kHz	252 kHz 2)		CT3LW	
		* Feed signal should be fed to loop antenna through the test loop antenna 60 cm distant from the appliance. * Repeat the step 1) and 2) until no further improvement occurs.				

5. FM Alignment

- Output of signal generator should not be greater than necessary to obtain an optimum output reading.
- Signal generator deviation : 40 kHz (75 kHz)
- RF signal frequency : 1 kHz
- Switch : Press the BAND button to FM and the FM MODE button to MONO

Step	Subject	Signal Generator Frequency	Set Frequency Setting	Equipment Connection	Adjustment Point	Adjust for
1	Tuning Band Widht	98.0 MHz (98.1 MHz)	98.0 MHz (98.1 MHz)	DC Volt meter to R39(TP2-TP3)	T5	Zero reading on DC Volt meter
2	THD	98.0 MHz (98.1 MHz)	98.0 MHz (98.1 MHz)	Distortion meter to speaker terminal of L or R channel	T6	Minimize distortion
3	Tuned Level	98.0 MHz(98.1 MHz) SSG output level : 10 μ V/m	98.0 MHz (98.1 MHz)		VR2	"Tuned" flag in the FL display light on

6. MPX Alignment

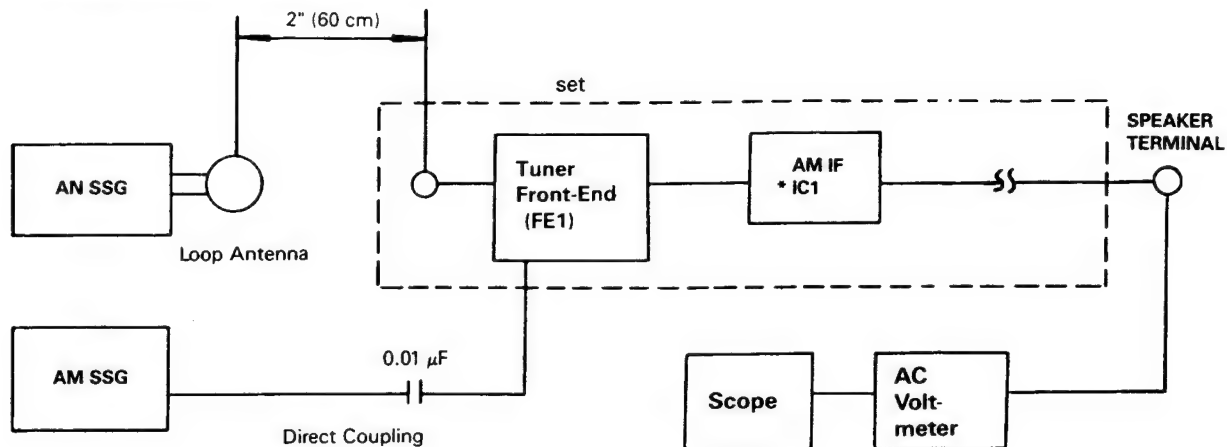
- Signal generator frequency : 98 MHz
- Signal generator deviation : 40 kHz (75 kHz)
- RF signal frequency : 1 kHz
- Signal generator output level : 1000 $\mu\text{V/m}$
- Connect signal generator to FM antenna terminal through FM dummy antenna (75 Ω)
- Switch : Press the BAND button to FM and the FM MODE button to STEREO

Step	Subject	19 kHz Modulation Level	Signal Generator Setting	Equipment Connection	Adjustment Point	Adjust for
1	VCO	8 % Modulation	Pilot off Carrier only	Frequency counter to TP4(HOT) of PCB and ground	VR3	76 kHz
2	Seperation R \rightarrow L	8 % Modulation	Pilot on	AC voltmeter to speaker terminal of R channel	VR4	Set AC voltmeter to 0 dB
				AC voltmeter to speaker terminal of L channel		AC voltmeter reading should be at least 20 dB below
3	Seperation L \rightarrow R	8 % Modulation	Pilot on	AC voltmeter to speaker terminal of L channel	VR4	Set AC voltmeter to 0 dB
				AC voltmeter to speaker terminal of R channel		AC voltmeter reading should be at least 20 dB below

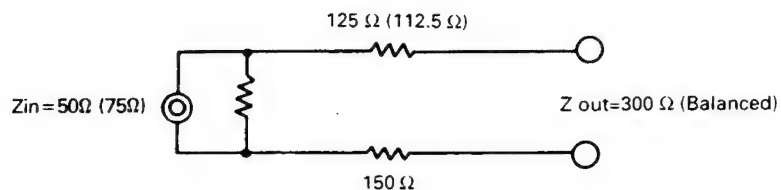
If you could not obtain -20 dB readings in steps 2 and 3, readjust VR4 until you obtain -20 dB readings for both steps 3 and 4. Normal is -25 dB.

7. Equipment Connection

7-1. AM Alignment Connection

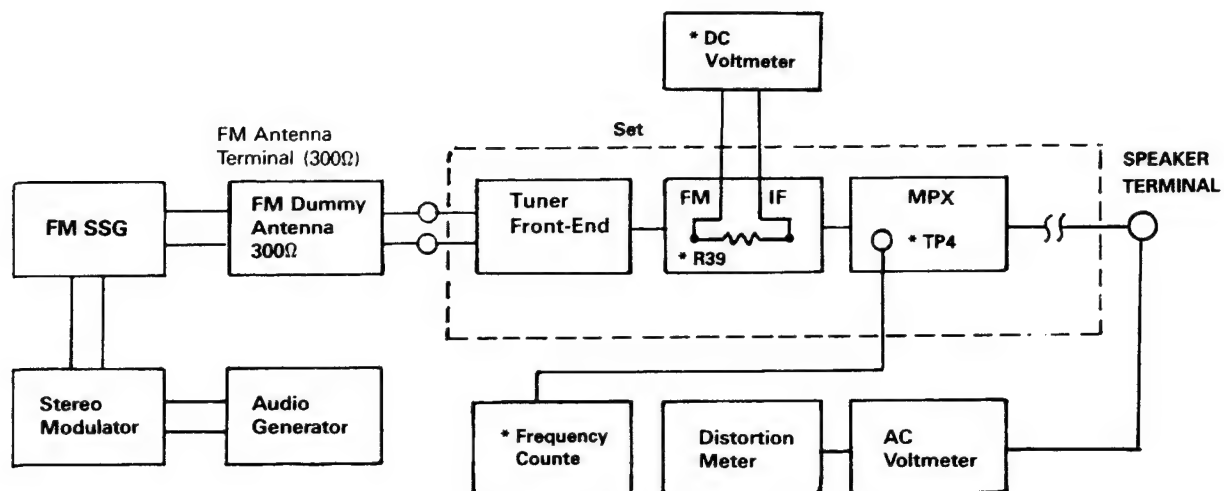


7-2. FM Dummy Antenna

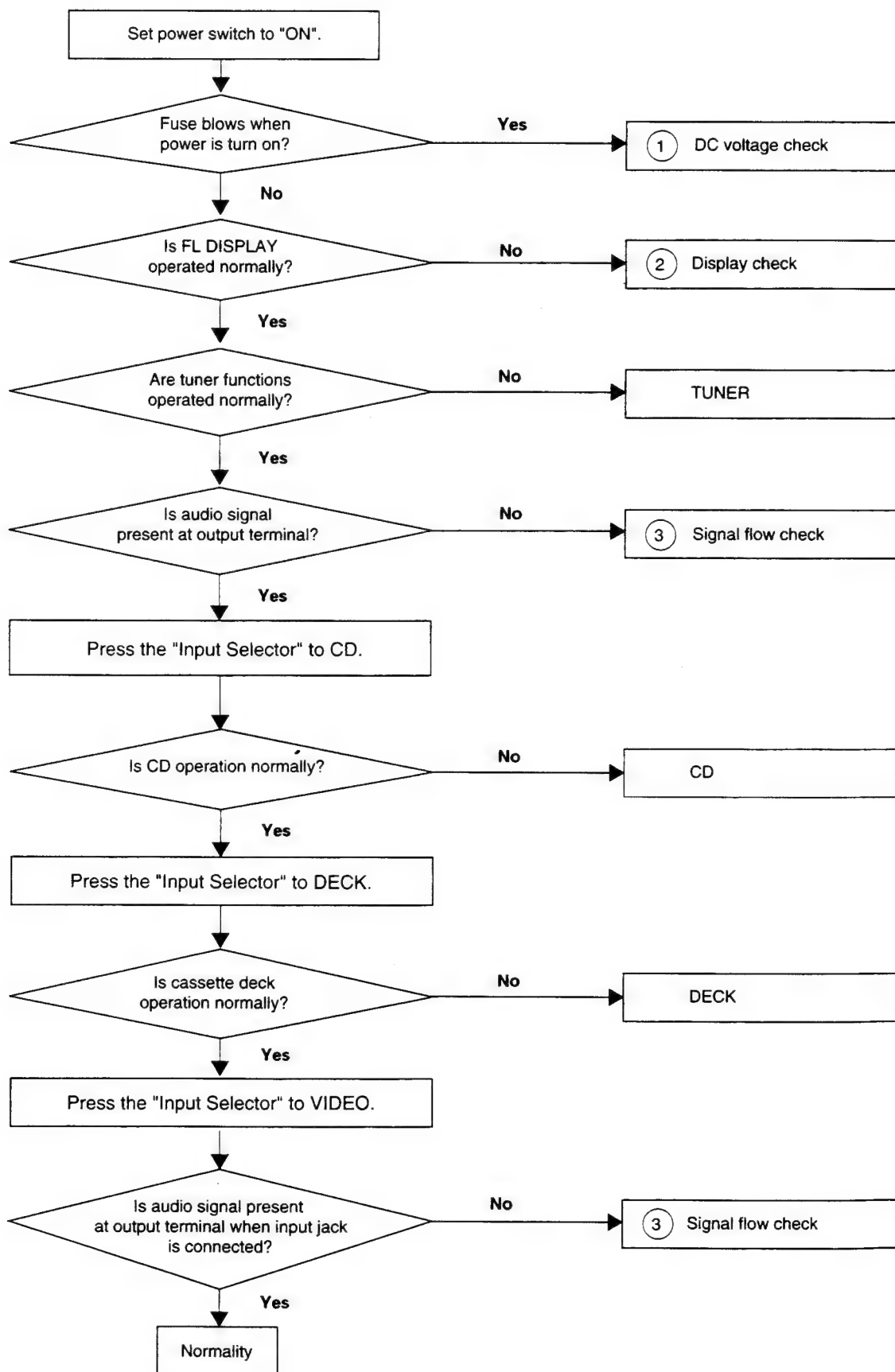


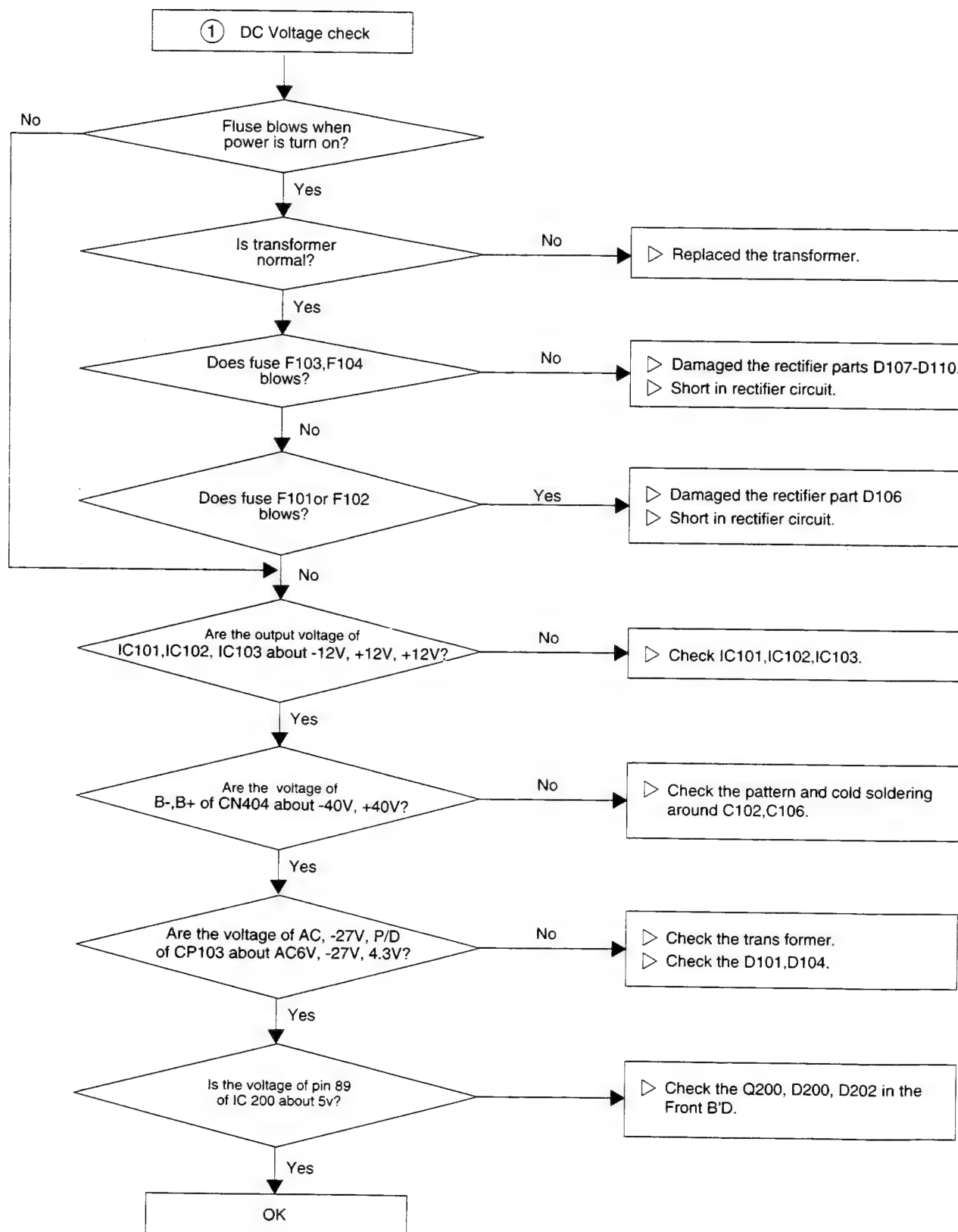
FM Dummy Antenna to 300 Ω Antenna terminal of system.

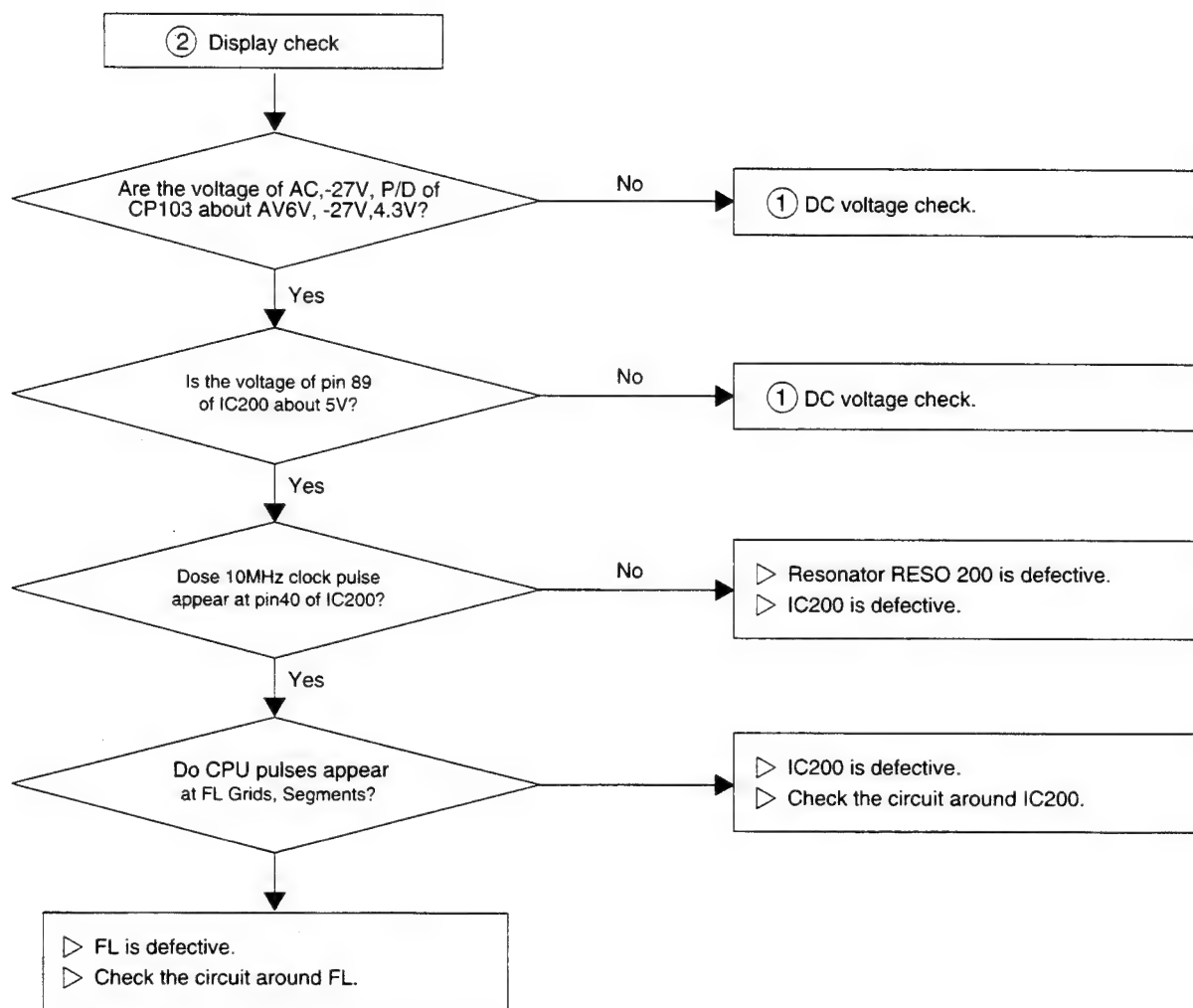
7-3. FM RF/IF and MPX Alignment Connection

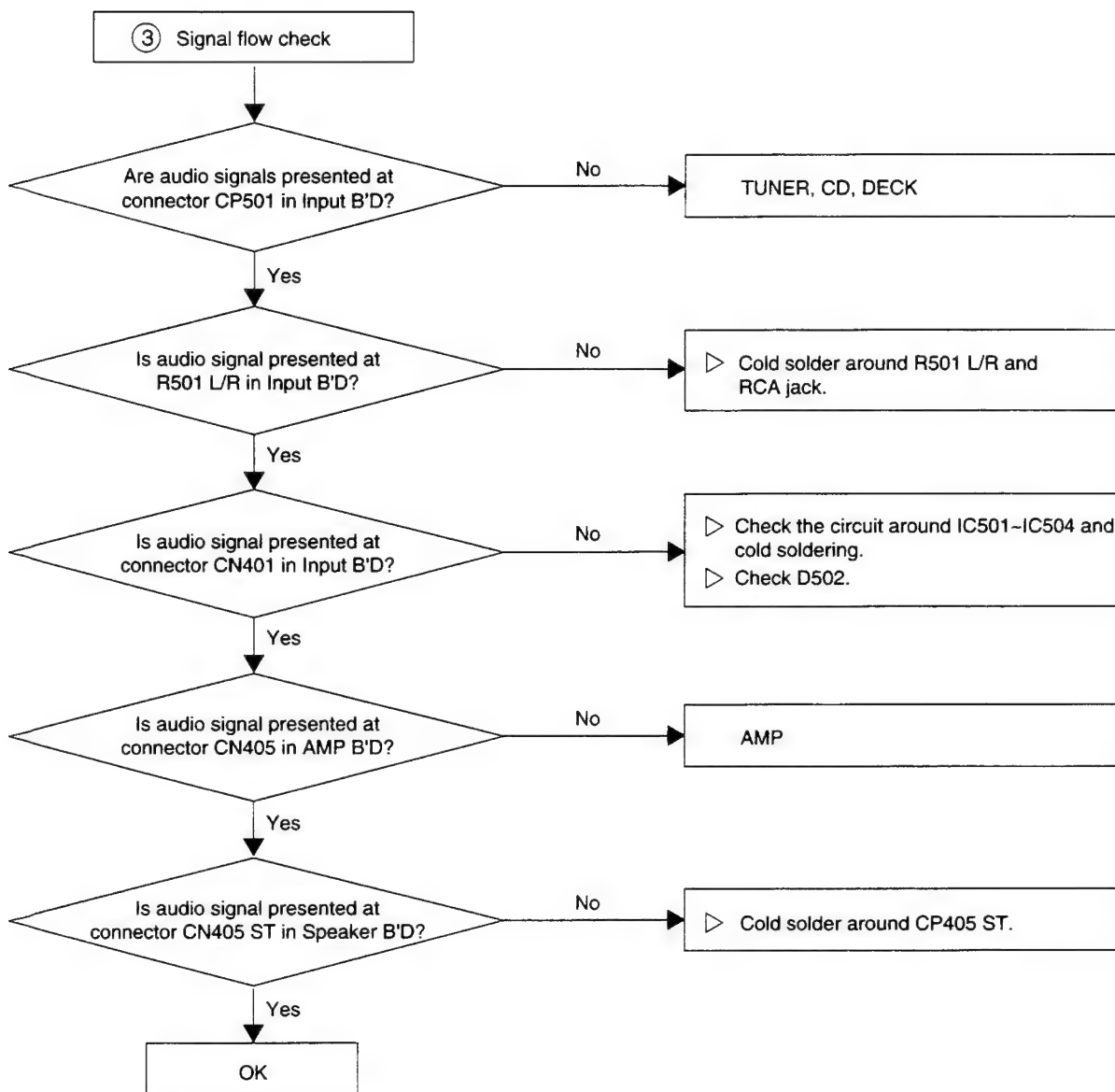


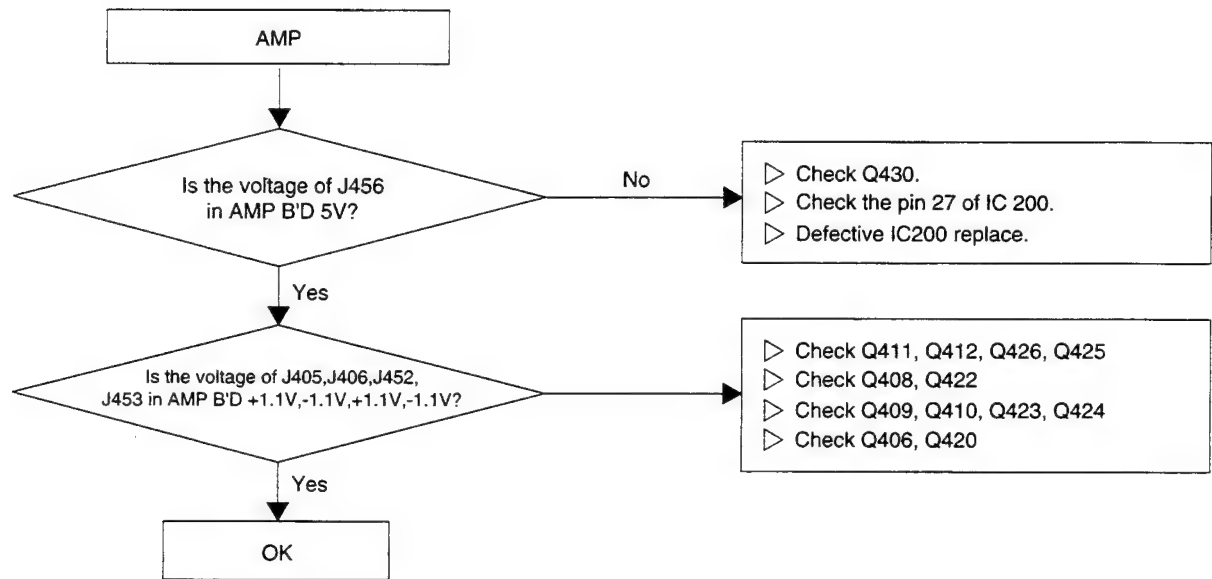
TROUBLESHOOTING

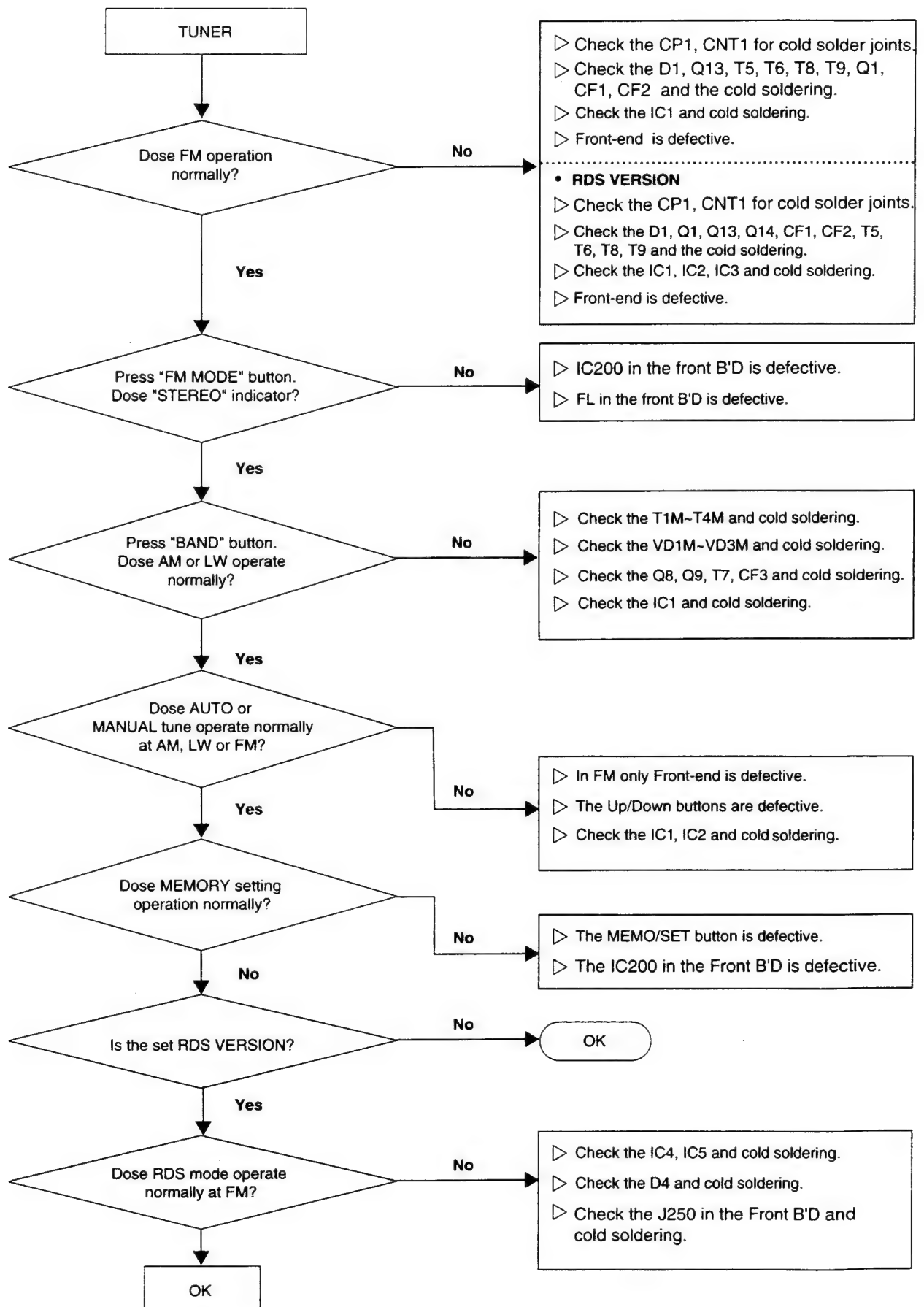












MECHANICAL PARTS LIST

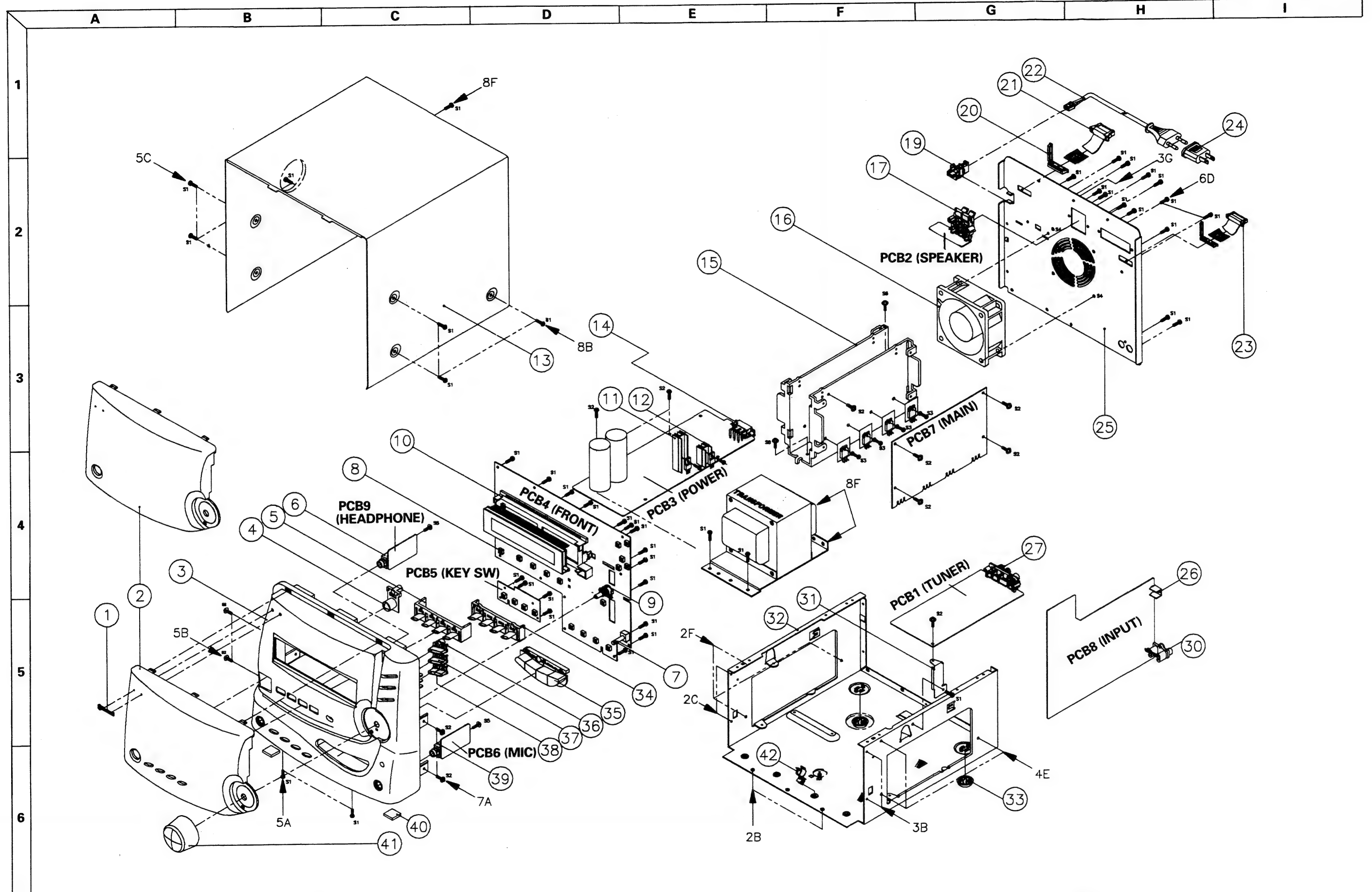
REF. NO.	DESCRIPTION	PARTS NO.	Q'TY	VERSION
	PACKAGE			
	BOX CARTON	601704178001	1	K
	BOX CARTON	601704178002	1	D,PT INDO
	CUSHION POLY	623004374401	1	
	FILM SOFT PE	632004002201	1	
	POLY BAG	633004009201	1	
	ACCESSORIES			
	ANTENNA WIRE FM	E60501002000	1	K,PT INDO
	ANTENNA WIRE FM	E60501004000	1	D
	COMPACT DISC DEMONSTRATION	651004003001	1	K(ONLY)
	COMMANDER ASS'Y	830004025U01	1	K
	COMMANDER ASS'Y	830004025U02	1	D,PT INDO
	BATTERY 1.5V AA(R6M)	G670001R5012	2	K(ONLY)
	ANTENNA AM LOOP STAND STRIP WIRE	E60501009000	1	K,PT INDO
	ANTENNA AM LOOP STAND TYPE	E60101000000	1	D
	MANUAL INSTRUCTION	570704584001	1	K
	MANUAL INSTRUCTION	570704583001	1	PT INDO
	MANUAL INSTRUCTION	570704583003	1	D
	CABINET & CHASSIS			
1	BADGE, SHERWOOD	563704066101	1	
(1)	BADGE, INKEL	563704067101	1	K(ONLY)
2	WINDOW PANEL	507704002301	1	
(2)	WINDOW PANEL	507704003301	1	D(ONLY)
3	PANEL FRONT	306704212101	1	
4	BUTTON POWER	509006660101	1	
5	BUTTON RDS, 4KEY	509005900101	1	
6	JACK , HTJ064-05B	G40204022193	1	
7(VR201)	VOLUME MIC, RK09K1130205-50KB	C45111530220	1	
8	SWITCH TACT (H:5)	G18004050001	15	
(8)	SWITCH TACT (H:5)	G18004050001	4	D(ONLY)
9(VR202)	SWITCH, ROTARY ENCODER	C49004106001	1	
10	GUIDE HOLDER, FL	432004081101	1	
11	HEATSINK, REGULATOR TR (H:45)	212004434801	1	
12	HEATSINK, REGULATOR TR (H:30)	212004433801	1	
13	COVER TOP	300704210603	1	
14	VOLTAGE SELECTOR, 6P	G06004054001	1	PT INDO(ONLY)
15	HEATSINK, POWER	212004253801	1	
16	FAN	G72004003001	1	
17	TERMINAL SPEAKER, PUSH TYPE, 4P	G59404021000	1	
19	STOPPER, CORD	438004016201	1	
20	STOPPER, CONNECTOR 11P	L10951044110	2	
21	SYSTEM CONNECTOR, 9P	L03358609701	1	
22	CORD AC POWER	L06104012101	1	A
(22)	CORD AC POWER	L06104040103	1	K
(22)	CORD AC POWER	L06104001101	1	D,PT INDO
23	SYSTEM CONNECTOR, 11P	L10928511800	1	
24	ADAPTER	L10928300410	1	PT INDO(ONLY)
25	CHASSIS BACK	320704266601	1	K
(25)	CHASSIS BACK	320704266602	1	D
(25)	CHASSIS BACK	320704266603	1	PT INDO
26	GROUND PLAT	307004552601	1	
27	TERMINAL ANTENNA, SCREW TYPE	G59004045000	1	D(ONLY)
(27)	TERMINAL ANTENNA, PUSH TYPE	G59004044000	1	
30	JACK RCA, 2P	G60120044001	1	
31	BRACKET PCB	401005622601	1	
32	CHASSIS MAIN	320004475601	1	
33	FOOT	400004057101	2	
34	BUTTON TACT, 4KEY	509005898101	1	
35	BUTTON FUNCTION	509704636101	1	
36	BUTTON INPUT	509705461101	1	
37	BUTTON SURROUND	509705463101	1	
38	BUTTON X-BASS	509705464101	1	
39(JACK380)	JACK , HTJ064-05B	G40204022193	1	
40	CUSHION FOOT	405004464501	2	
41	KNOB ROTARY VOLUME	509006663101	1	
42	CLAMP WIRE	433004063301	1	
	HARDWARE KIT			
S1	SCREW, #8 BTT 3X8B	B020030083B1	52	
(S1)	SCREW, #8 BTT 3X8B	B020030083B1	54	PT INDO
S2	SCREW, #8 WPTT 3X6Y	B020030061W1	16	
S3	SCREW, HEATSINK (L:12)	150704113601	4	
S4	SCREW, #2PTC 5X10B	B010545103P1	2	
S5	SCREW, MECHA	150704102601	2	
S6	SCREW, WPM 4X10Y	B010040101W1	2	
N1	NUT, FLANGE M4Y	B200000401F0	2	
	MISCELLANEOUS			
	POWER TRANSFORMER, 220V 60Hz	820028101417	1	K
	POWER TRANSFORMER, 230V 50Hz	820028101407	1	D
	POWER TRANSFORMER, 110/220V 50/60Hz	820028101427	1	PT INDO
	THERMISTER, 2P 180mm	F34055030000	1	

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol Δ in the parts list are of special significance to safety. When replacing a component identified with Δ , use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

EXPLODED VIEW

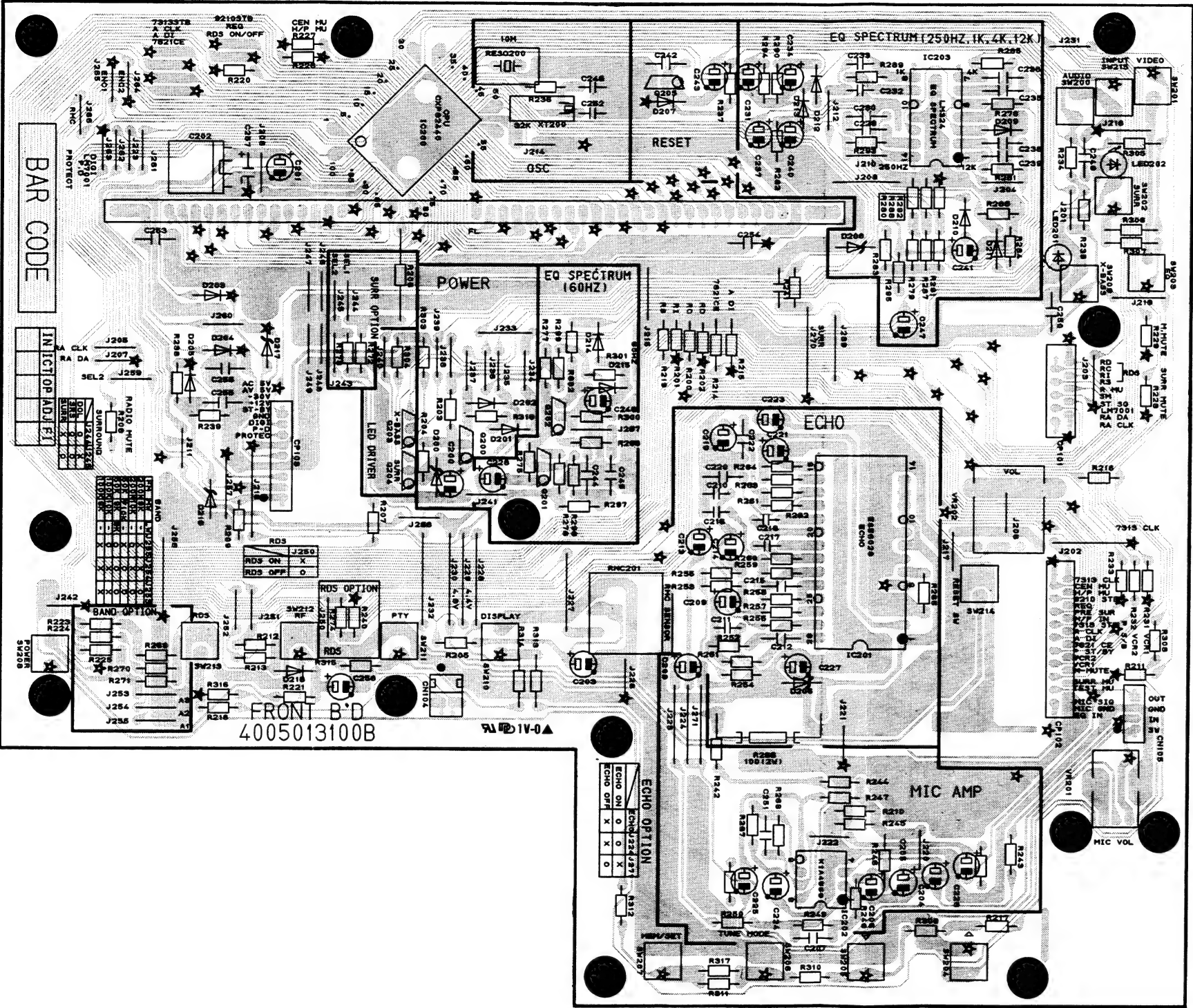
Model No. : ATX-676



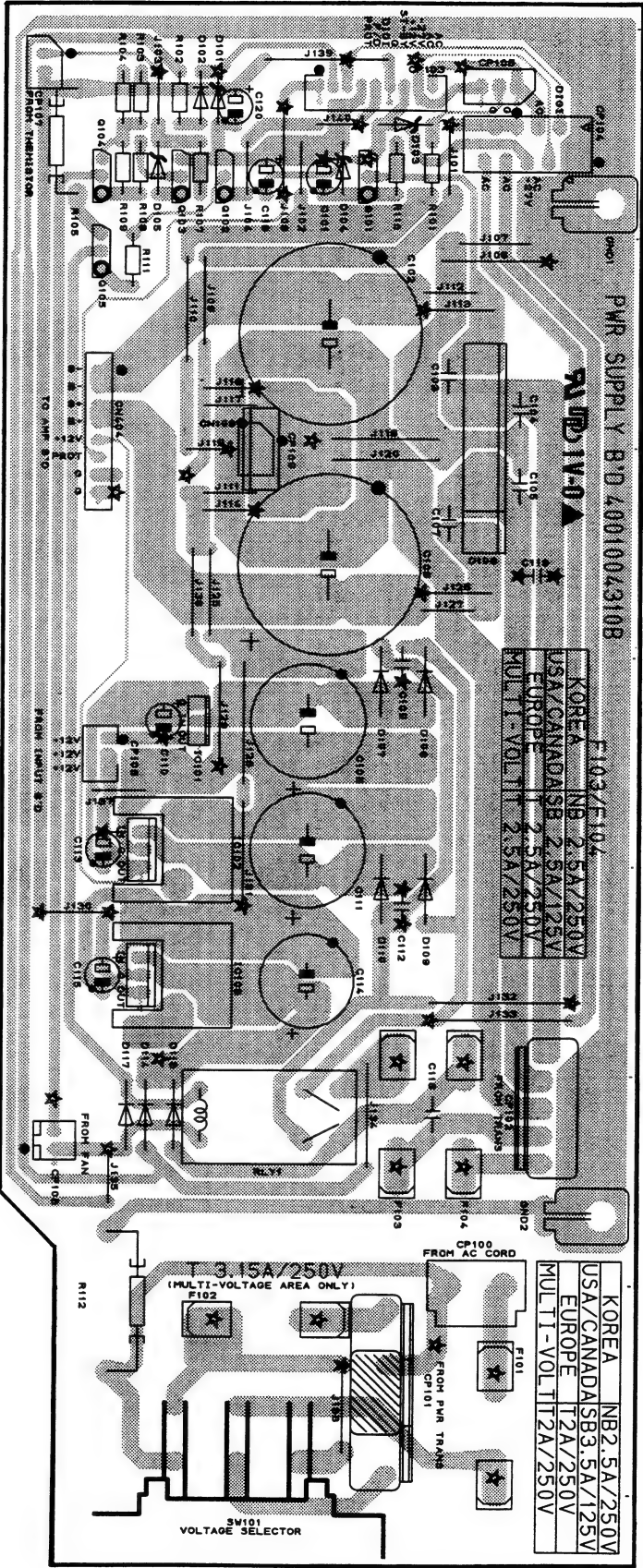
PRINTED CIRCUIT BOARDS

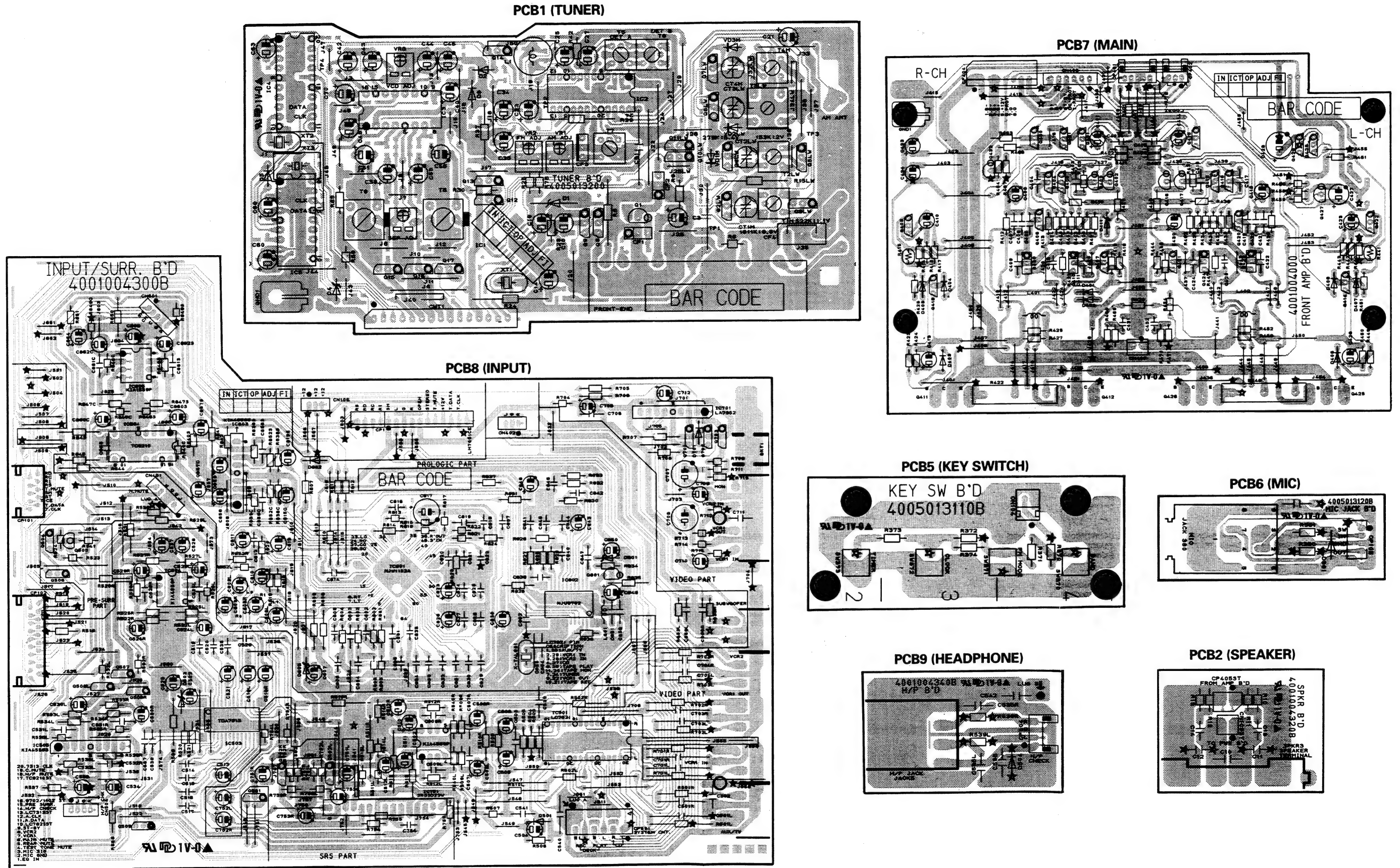
Model No. : ATX-676

PCB4 (FRONT)



PCB3 (POWER)





ELECTRICAL PARTS LIST

REF. NO.	DESCRIPTION	PARTS NO.	Q'TY	VERSION
PCB1 ASSEMBLY P.C. BOARD TUNER(PT INDO, K VERSION)				
CAPACITORS				
C1/C2	CERAMIC CHIP	0.022 μ F 50 V Z D01122317721	2	
C3	ELECTROLYTIC SG	100 μ F 16 V M D04010108310	1	
C4	CERAMIC CHIP CH	470 μ F 50 V J D01047116721	1	
C5	CERAMIC CHIP CH	12 μ F 50 V J D01012016721	1	
C9	CERAMIC CHIP	0.047 μ F 50 V Z D01147359721	1	
C10	ELECTROLYTIC SG	1 μ F 50 V M D04001008710	1	
C11	CERAMIC CHIP	0.01 μ F 50 V Z D01110317721	1	
C12	CERAMIC CHIP	0.022 μ F 50 V Z D01122317721	1	
C13	CERAMIC CHIP	0.01 μ F 50 V Z D01110317721	1	
C14	ELECTROLYTIC SG	47 μ F 16 V M D04047008310	1	
C15	CERAMIC CHIP	0.022 μ F 50 V Z D01122317721	1	
C16/C17	CERAMIC CHIP CH	18 μ F 50 V J D01018016721	2	
C18	CERAMIC CHIP CH	100 μ F 50 V J D01010116721	1	
C19	ELECTROLYTIC SG	47 μ F 16 V M D04047008310	1	
C20	CERAMIC CHIP	0.022 μ F 50 V Z D01122317721	1	
C21	ELECTROLYTIC SG	10 μ F 50 V M D04010008710	1	
C22-C24	CERAMIC CHIP	0.022 μ F 50 V Z D01122317721	3	
C25	ELECTROLYTIC SG	1 μ F 50 V M D04001008710	1	
C26	CERAMIC CHIP	0.022 μ F 50 V Z D01122317721	1	
C27	ELECTROLYTIC SG	47 μ F 16 V M D04047008310	1	
C28	CERAMIC CHIP CH	330 μ F 50 V J D01033116721	1	
C32	CERAMIC CHIP	0.022 μ F 50 V Z D01122317721	1	
C33	ELECTROLYTIC SG	4.7 μ F 50 V M D0404R708710	1	
C34	ELECTROLYTIC SG	3.3 μ F 50 V M D0403R308710	1	
C35	ELECTROLYTIC SG	4.7 μ F 50 V M D0404R708710	1	
C36	CERAMIC CHIP	0.022 μ F 50 V Z D01122317721	1	
C37	CERAMIC CHIP	0.003 μ F 50 V Z D01133217721	1	
C38	CERAMIC CHIP	0.039 μ F 50 V Z D01139359721	1	
C39	CERAMIC CHIP	0.022 μ F 50 V Z D01122317721	1	
C40	ELECTROLYTIC SG	4.7 μ F 50 V M D0404R708710	1	
C41	CERAMIC CHIP	0.001 μ F 50 V Z D01110217721	1	
C42	ELECTROLYTIC SG	3.3 μ F 50 V M D0403R308710	1	
C43/C44	ELECTROLYTIC SG	1 μ F 50 V M D04001008710	2	
C45	ELECTROLYTIC SG	3.3 μ F 50 V M D0403R308710	1	
C46	CERAMIC CHIP	0.047 μ F 50 V Z D01147359721	1	
C47	CERAMIC CHIP CH	680 μ F 50 V J D01068116721	1	
C48	ELECTROLYTIC SG	100 μ F 16 V M D04010108310	1	
C49/C50	CERAMIC CHIP	0.001 μ F 50 V Z D01110217721	2	PT INDO
(C49/C50)	CERAMIC CHIP	0.002 μ F 50 V Z D01115217721	2	K
C51	ELECTROLYTIC SG	2.2 μ F 50 V M D0402R208710	1	
C52	CERAMIC CHIP	0.002 μ F 50 V Z D01122217721	1	
C53	ELECTROLYTIC SG	22 μ F 35 V M D04022008510	1	
C54	CERAMIC CHIP CH	270 μ F 50 V J D01027116721	1	
C55	ELECTROLYTIC SG	22 μ F 35 V M D04022008510	1	
C56	ELECTROLYTIC SG	2.2 μ F 50 V M D0402R208710	1	
C57-C59	CERAMIC CHIP	0.002 μ F 50 V Z D01122217721	3	
C61	CERAMIC TUBULAR	10000 μ F 16 V J D00510377353	1	
C70	ELECTROLYTIC SG	1 μ F 50 V M D04001008710	1	
C71	CERAMIC CHIP	10 μ F 50 V J D01110056721	1	
CT1M	TRIMMER, 20 pF	D11020090110	1	
CT4M	TRIMMER, 10 pF	D11010090110	1	
FILTERS				
CF1/CF2	CERAMIC, SFE10.7MS3GH-ATF21	E43010700015	2	PT INDO
(CF1/CF2)	CERAMIC, SFE10.7MA8-A-TF21	E43010700014	2	K
CF3	CERAMIC, CFM2-450BL	E43145000012	1	
COILS				
T1M	AM-OSC	D94001001000	1	
T4M	MW-ANT(W)	D30401000000	1	
T5	FM-DET-A, K5713FKG	D97001002000	1	
T6	FM-DET-B, K5714K	D97001003000	1	
T7	AM-IFT, P-7SB	D95001005000	1	
T8/T9	MPX, 19/38K	E40101001000	2	
CONNECTOR				
CNT1	PLUG, 5267-11A	L10252670110	1	
DIODES				
D1	ZENER, UZ 5.1BSB	K06005R11452	1	
D2/D3	SWITCHING, 1N4148M	K00041480152	2	
VD1L	VARECTOR, SVC321C-2	K08003210052	1	
VD3M	VARECTOR, SVC321C-2	K08003210052	1	
INTEGRATED CIRCUITS				
IC1	LM7001M	J12470010001	1	
IC2	LA1266	J12412660000	1	
IC3	HA12016	J12412016000	1	
TRANSISTORS				
Q1	KTC1923Y/BKTC3194Y, NPN	J5023194Y005	1	
Q8/Q9	KTC2240/BKTC3200, NPN	J5023200B005	2	
Q12/Q13	KRA107M/DTA114YS	J601107M0005	2	
Q15/Q16	DTC323TS	J602323TS005	2	
Q17	KRA107M/DTA114YS	J601107M0005	1	
RESISTORS				
R1	CHIP	100 ohm 1/10 W J C20001016020	1	
R2	CHIP	560 ohm 1/10 W J C20005616020	1	

REF. NO.	DESCRIPTION	PARTS NO.	Q'TY	VERSION
R3	CHIP	1.8 kohm 1/10 W J C20001826020	1	
R4/R5	CHIP	330 ohm 1/10 W J C20003316020	2	
R8	METAL FILM	470 ohm 1/5 W J C06004716P52	1	
R9	METAL FILM	47 ohm 1/5 W J C06004706P52	1	
R10	CHIP	100 kohm 1/10 W J C20001046020	1	
R18	CHIP	100 kohm 1/10 W J C20001046020	1	
R20	CHIP	1 kohm 1/10 W J C20001026020	1	
R21	CHIP	10 kohm 1/10 W J C20001036020	1	
R22	CHIP	1.5 kohm 1/10 W J C20001526020	1	
R23	METAL FILM	820 ohm 1/5 W J C06008216P52	1	
R24	METAL FILM	270 ohm 1/5 W J C06002716P52	1	
R25	METAL FILM	390 ohm 1/5 W J C06003916P52	1	
R26-R28	CHIP	1 kohm 1/10 W J C20001026020	3	
R30	CARBON FILM	33 kohm 1/5 W J C00003336P52	1	
R31	CHIP	2.7 kohm 1/10 W J C20002736020	1	
R32	CHIP	68 kohm 1/10 W J C20006836020	1	
R33	CHIP	10 kohm 1/10 W J C20001036020	1	
R34	CHIP	22 kohm 1/10 W J C20002236020	1	
R35	CHIP	2.4 kohm 1/10 W J C20002426020	1	PT INDO
(R35)	CHIP	1 kohm 1/10 W J C20001026020	1	K
R36	CHIP	1.8 kohm 1/10 W J C20001826020	1	
R37	CARBON FILM	100 kohm 1/5 W J C00001046P52	1	
R38	CHIP	22 ohm 1/10 W J C20002206020	1	
R39	CARBON FILM	39 kohm 1/5 W J C00003936P52	1	PT INDO
(R39)	CARBON FILM	18 kohm 1/5 W J C00001836P52	1	K
R40	CHIP	10 kohm 1/10 W J C20001036020	1	
R41	CHIP	3.3 kohm 1/10 W J C20003326020	1	
R42	METAL FILM	47 ohm 1/5 W J C06004706P52	1	
R43	CHIP	0 ohm 1/10 W J C20000006020	1	
R46	CHIP	100 kohm 1/10 W J C20001046020	1	
R48	CHIP	5.6 kohm 1/10 W J C20005626020	1	
R49	CHIP	1 kohm 1/10 W J C20001026020	1	
R50	CHIP	100 kohm 1/10 W J C20001046020	1	
R51	CHIP	5.6 kohm 1/10 W J C20005626020	1	
R52	CHIP	2.7 kohm 1/10 W J C20002726020	1	
R53/R54	CHIP	51 kohm 1/10 W J C20005136020	2	PT INDO
(R53/R54)	CHIP	47 kohm 1/10 W J C20004736020	2	K
R55	CHIP	2.7 kohm 1/10 W J C20002726020	1	
R56/R57	CHIP	3.9 kohm 1/10 W J C20003926020	2	PT INDO
(R56/R57)	CHIP	6.8 kohm 1/10 W J C20006826020	2	K
R58	CHIP	3.9 kohm 1/10 W J C20003926020	1	
R59/R60	CHIP	27 kohm 1/10 W J C20002736020	2	
R61	CHIP	1 kohm 1/10 W J C20001026020	1	
R62	CHIP	3.3 kohm 1/10 W J C20003326020	1	
R63	CHIP	1 kohm 1/10 W J C20001026020	1	
R64	CHIP	3.3 kohm 1/10 W J C20003326020	1	
R65	METAL FILM	100 ohm 1/5 W J C06001016P52	1	
R67	CHIP	10 kohm 1/10 W J C20001036020	1	
R75	CHIP	22 kohm 1/10 W J C20002236020	1	
R76/R77	CHIP	0 ohm 1/10 W J C20000006020	2	
R78	METAL FILM	390 ohm 1/5 W J C06003916P52	1	
J14	CHIP	0 ohm 1/10 W J C20000006020	1	
J39	CHIP	0 ohm 1/10 W J C20000006020	1	
J50	CHIP	0 ohm 1/10 W J C20000006020	1	
SEMI FIXED VARIABLE RESISTORS				
VR1	20K(B)-H	C54120311500	1	
VR2	100K(B)-H	C54110411500	1	
VR3	5K(B)-H	C54150211500	1	
VR4	100K(B)-H	C54110411500	1	
MISCELLANEOUS				
XT1	CRYSTAL, HC49U T 7.2MHz CL12PF	E80072000008	1	
27	TERMINAL ANTENNA, PUSH TYPE	G59004044000	1	
	FM FRONT END ASS'Y	S4002011345	1	
PCB1 ASSEMBLY P.C. BOARD TUNER(D VERSION ONLY)				
CAPACITORS				
C1/C2	CERAMIC CHIP	0.022 μ F 50 V Z D01122317721	2	
C3	ELECTROLYTIC SG	100 μ F 16 V M D04010108310	1	
C4	CERAMIC CHIP CH	470 μ F 50 V J D01047116721	1	
C5	CERAMIC CHIP CH	8 μ F 50 V J D01008011721	1	
CTLW	CERAMIC CHIP	0.022 μ F 50 V Z D01122317721	1	
C8LW	CERAMIC CHIP	0.01 μ F 50 V Z D01110317721	1	
C9	CERAMIC CHIP	0.047 μ F 50 V Z D01147359721	1	
C10	ELECTROLYTIC SG	1 μ F 50 V M D04001008710	1	
C11	CERAMIC CHIP	0.01 μ F 50 V Z D01110317721	1	
C12	CERAMIC CHIP	0.022 μ F 50 V Z D01122317721	1	
C13	CERAMIC CHIP	0.01 μ F 50 V Z D01110317721	1	
C14	ELECTROLYTIC SG	47 μ F 25 V M D04047008410	1	
C15	CERAMIC CHIP	0.022 μ F 50 V Z D01122317721	1	
C16/C17	CERAMIC CHIP CH	18 μ F 50 V J D01018016721	2	
C18	CERAMIC CHIP CH	100 μ F 50 V J D01010116721	1	
C19	ELECTROLYTIC SG	47 μ F 25 V M D04047008410	1	
C20	CERAMIC CHIP	0.022 μ F 50 V Z D01122317721	1	
C21	ELECTROLYTIC SG	10 μ F 50 V M D04010008710	1	
C22-C24	CERAMIC CHIP	0.022 μ F 50 V Z D01122317721	3	
C25	ELECTROLYTIC SG	1 μ F 50 V M D04001008710	1	
C26	CERAMIC CHIP	0.022 μ F 50 V Z D01122317721	1	
C27	ELECTROLYTIC SG	47 μ F 25 V M D04047008410	1	
C28	CERAMIC CHIP CH	330 μ F 50 V J D01033116721	1	

REF. NO.	DESCRIPTION	PARTS NO.	Q'TY	VERSION
C29/C30	CERAMIC CHIP CH	100 pF 50 V J D01010116721	2	
C31/C32	CERAMIC CHIP	0.022 μF 50 V Z D01122317721	2	
C33	ELECTROLYTIC SG	4.7 μF 50 V M D0404R708710	1	
C34	ELECTROLYTIC SG	3.3 μF 50 V M D0403R308710	1	
C35	ELECTROLYTIC SG	4.7 μF 50 V M D0404R708710	1	
C36	CERAMIC CHIP	0.022 μF 50 V Z D01122317721	1	
C37	CERAMIC CHIP	0.003 μF 50 V Z D01133217721	1	
C38	CERAMIC CHIP	0.039 μF 50 V Z D01139359721	1	
C39	CERAMIC CHIP	0.022 μF 50 V Z D01122317721	1	
C40	ELECTROLYTIC SG	4.7 μF 50 V M D0404R708710	1	
C41	CERAMIC CHIP	0.001 μF 50 V Z D01110217721	1	
C42	ELECTROLYTIC SG	3.3 μF 50 V M D0403R308710	1	
C43/C44	ELECTROLYTIC SG	1 μF 50 V M D04001008710	2	
C45	ELECTROLYTIC SG	3.3 μF 50 V M D0403R308710	1	
C46	CERAMIC CHIP	0.047 μF 50 V Z D01147359721	1	
C47	CERAMIC CHIP CH	680 pF 50 V J D01068116721	1	
C48	ELECTROLYTIC SG	100 μF 16 V M D04010108310	1	
C49/C50	CERAMIC CHIP	0.001 μF 50 V Z D01110217721	2	
C51	ELECTROLYTIC SG	2.2 μF 50 V M D0402R208710	1	
C52	CERAMIC CHIP	0.002 μF 50 V Z D01122217721	1	
C53	ELECTROLYTIC SG	22 μF 25 V M D04022008410	1	
C54	CERAMIC CHIP CH	270 μF 50 V J D01027116721	1	
C55	ELECTROLYTIC SG	22 μF 25 V M D04022008410	1	
C56	ELECTROLYTIC SG	2.2 μF 50 V M D0402R208710	1	
C57-C59	CERAMIC CHIP	0.002 μF 50 V Z D01122217721	3	
C60	ELECTROLYTIC SG	47 μF 25 V M D04047008410	1	
C61	CERAMIC TUBULAR	10000 pF 16 V J D00510377353	1	
C62	CERAMIC CHIP CH	270 pF 50 V J D01027116721	1	
C63	ELECTROLYTIC SG	10 μF 50 V M D04010008710	1	
C64	CERAMIC CHIP	0.1 μF 50 V Z D01110459721	1	
C65/C66	CERAMIC CHIP CH	27 pF 50 V J D01027016721	2	
C67	CERAMIC CHIP	0.1 μF 50 V Z D01110459721	1	
C68	ELECTROLYTIC SG	10 μF 50 V M D04010008710	1	
C69	CERAMIC CHIP	0.1 μF 50 V Z D01110459721	1	
C6LW	CERAMIC CHIP CH	150 pF 50 V J D01015116721	1	
C70	ELECTROLYTIC SG	1 μF 50 V M D04001008710	1	
C71	CERAMIC CHIP	10 pF 50 V J D01110058721	1	
CT1M	TRIMMER, 20 pF		D11020090110	1
CT2L	TRIMMER, 20 pF		D11020090110	1
CT3LW	TRIMMER, 10 pF		D11010090110	1
CT4M	TRIMMER, 10 pF		D11010090110	1
FILTERS				
CF1/CF2	CERAMIC, SFE10.7MS3GH-ATF21	E43010700015	2	
CF3	CERAMIC, CFM2-450BL	E43145000012	1	
CF4	BPF, PFWB4	E44001002000	1	
COILS				
L1	INDUCTOR, 20.8MH	D33020800112	1	
T1M	AM-OSC	D94001001000	1	
T2LW	LW-OSC	D94101000000	1	
T3LW	LW-ANT(B)	D30401001000	1	
T4M	MW-ANT(W)	D30401000000	1	
T5	FM-DET-A, K8713FKG	D97001002000	1	
T6	FM-DET-B, K5714K	D97001003000	1	
T7	AM-IFT, P-7SB	D95001005000	1	
T8/T9	MPX, 19/38K	E40101001000	2	
CONNECTOR				
CNT1	PLUG, 5267-15A	L10252670150	1	
DIODES				
D1	ZENER, UZ 5.1BSB	K06005R11452	1	
D2/D3	SWITCHING, 1N4148M	K00041480152	2	
D4	ZENER, UZ 5.1BSB	K06005R11452	1	
D5	SWITCHING, 1N4148M	K00041480152	1	
VD1M	VARECTOR, SVC321SPA-C	K08003210052	1	
VD2LW	VARECTOR, SVC321SPA-C	K08003210C52	1	
VD3M	VARECTOR, SVC321SPA-C	K08003210052	1	
INTEGRATED CIRCUITS				
IC1	LM7001M	J12470010001	1	
IC3	HA12016	J12412016000	1	
IC4	TDA7330B	J12473300000	1	
IC5	LC7073	J12470730000	1	
TRANSISTORS				
Q1	KTC1923Y/BKTC3194Y, NPN	J5023194Y005	1	
Q10LW	2SC3199Y/BKTC3199Y, NPN	J5023199Y005	1	
Q11LW	KRA107M/DTA114YS	J601107M0005	1	
Q12/Q13	KRA107M/DTA114YS	J601107M0005	2	
Q14	2SC3199Y/BKTC3199Y, NPN	J5023199Y005	1	
Q15/Q16	DTC323TS	J602323TS005	2	
Q17	KRA107M/DTA114YS	J601107M0005	1	
Q2LW-Q7LW	2SC3199Y/BKTC3199Y, NPN	J5023199Y005	6	
Q8/Q9	KTC2240/BKTC3200, NPN	J5023200B005	2	
RESISTORS				
R1	CHIP	100 ohm 1/10 W J C20001016020	1	
R2	CHIP	560 ohm 1/10 W J C20005616020	1	
R3	CHIP	1.8 kohm 1/10 W J C20001826020	1	

REF. NO.	DESCRIPTION	PARTS NO.	Q'TY	VERSION
R4/R5	CHIP	330 ohm 1/10 W J C20003316020	2	
R6	METAL FILM	100 kohm 1/5 W J C06001046P52	1	
R7	CHIP	22 kohm 1/10 W J C20002236020	1	
R8	METAL FILM	470 ohm 1/5 W J C06004716P52	1	
R9	METAL FILM	47 ohm 1/5 W J C06004706P52	1	
R10	CHIP	100 kohm 1/10 W J C20001046020	1	
R11LW	CHIP	1.5 Mohm 1/10 W J C20001556020	1	
R12LW	CHIP	47 kohm 1/10 W J C20004736020	1	
R13LW	CHIP	47 kohm 1/10 W J C20004736020	1	
R14LW	CHIP	47 kohm 1/10 W J C20004736020	1	
R15LW	CHIP	47 kohm 1/10 W J C20004736020	1	
R16LW	CHIP	100 kohm 1/10 W J C20001046020	1	
R17LW	CHIP	47 kohm 1/10 W J C20004736020	1	
R18	CHIP	100 kohm 1/10 W J C20001046020	1	
R19LW	CHIP	47 kohm 1/10 W J C20004736020	1	
R20	CHIP	1 kohm 1/10 W J C20001026020	1	
R21	CHIP	10 kohm 1/10 W J C20001036020	1	
R22	CHIP	1.5 kohm 1/10 W J C20001526020	1	
R23	METAL FILM	820 ohm 1/5 W J C06008216P52	1	
R24	METAL FILM	270 ohm 1/5 W J C06002716P52	1	
R25	METAL FILM	390 ohm 1/5 W J C06003916P52	1	
R26-R28	CHIP	1 kohm 1/10 W J C20001026020	3	
R29LW	CHIP	10 kohm 1/10 W J C20001036020	1	
R30	CARBON FILM	33 kohm 1/5 W J C00003336P52	1	
R31	CHIP	2.7 kohm 1/10 W J C20002726020	1	
R32	CHIP	68 kohm 1/10 W J C20006836020	1	
R33	CHIP	10 kohm 1/10 W J C20001036020	1	
R34	CHIP	22 kohm 1/10 W J C20002236020	1	
R35	CHIP	3.9 kohm 1/10 W J C20003926020	1	
R36	CHIP	1.8 kohm 1/10 W J C20001826020	1	
R37	METAL FILM	100 kohm 1/5 W J C06001046P52	1	
R38	CHIP	22 ohm 1/10 W J C20002206020	1	
R39	CARBON FILM	39 kohm 1/5 W J C00003936P52	1	
R40	CHIP	10 kohm 1/10 W J C20001036020	1	
R41	CHIP	3.3 kohm 1/10 W J C20003326020	1	
R42	METAL FILM	47 ohm 1/5 W J C06004706P52	1	
R43	CHIP	1.8 kohm 1/10 W J C20001826020	1	
R44	CHIP	47 kohm 1/10 W J C20004736020	1	
R45	CHIP	1 kohm 1/10 W J C20001026020	1	
R46	CHIP	100 kohm 1/10 W J C20001046020	1	
R47	CHIP	22 ohm 1/10 W J C20002206020	1	
R48	CHIP	5.6 kohm 1/10 W J C20005626020	1	
R49	CHIP	1 kohm 1/10 W J C20001026020	1	
R50	CHIP	100 kohm 1/10 W J C20001046020	1	
R51	CHIP	5.6 kohm 1/10 W J C20005626020	1	
R52	CHIP	2.7 kohm 1/10 W J C20002726020	1	
R53/R54	CHIP	51 kohm 1/10 W J C20005136020	2	
R55	CHIP	2.7 kohm 1/10 W J C20002726020	1	
R56/R57	CHIP	2.4 kohm 1/10 W J C20002426020	2	
R58	CHIP	3.9 kohm 1/10 W J C20003926020	1	
R59/R60	CHIP	27 kohm 1/10 W J C20002736020	2	
R61	CHIP	1 kohm 1/10 W J C20001026020	1	
R62	CHIP	3.3 kohm 1/10 W J C20003326020	1	
R63	CHIP	1 kohm 1/10 W J C20001026020	1	
R64	CHIP	3.3 kohm 1/10 W J C20003326020	1	
R65	METAL FILM	100 ohm 1/5 W J C06001016P52	1	
R67	CHIP	10 kohm 1/10 W J C20001036020	1	
R68	METAL FILM	680 ohm 1/5 W J C06006816P52	1	
R69	CHIP	2.2 Mohm 1/10 W J C20002256020	1	
R70-R74	CHIP	10 kohm 1/10 W J C20001036020	5	
R75-R77	CHIP	0 ohm 1/10 W J C20000006020	3	
R78	METAL FILM	390 ohm 1/5 W J C06003916P52	1	
J14	CHIP	0 ohm 1/10 W J C20000006020	1	
J41	CHIP	0 ohm 1/10 W J C20000006020	1	
J50	CHIP	0 ohm 1/10 W J C20000006020	1	
SEMI FIXED RESISTORS				
VR1	20K(B)-H	C54120311500	1	
VR2	100K(B)-H	C54110411500	1	
VR3	5K(B)-H	C54150211500	1	
VR4	100K(B)-H	C54110411500	1	
MISCELLANEOUS				
XT1	CRYSTAL, 7.2MHz	E80072000008	1	
XT2	CRYSTAL, 4.332MHz	E80043320005	1	
XT3	RESONATOR, CST4.00MGW-TF01	E83040000007	1	
FE1	FM FRONT END, FTA4-460V	E90044600010	1	
27	TERMINAL ANTENNA, SCREW TYPE	G59004045000	1	

PCB2	ASSEMBLY P.C. BOARD SPEAKER
C10-C12	CAP, CERAMIC TUBULAR 0.005 μ F 50 V Z D00547277353 3 D
C13/C14	CAP, MYLAR 0.047 μ F 100 V J D02047306C06 2
CN109ST	CNT, LEAD ASSY, 2P, 240mm L02102243711 1
CP405ST	CNT, PLUG, 5267-02A L10252670020 1
R10-R13	RES, METAL FILM 22 ohm 1/5 W J C06002206P52 4
17	TERMINAL SPEAKER, PUSH TYPE, 4P G59404021000 1

PCB3	ASSEMBLY P.C. BOARD POWER CAPACITORS
C101	ELECTROLYTIC SG 10 μ F 50 V M D04010008710 1
C102	ELECTROLYTIC HS 4700 μ F 50 V M D04047208733 1

REF. NO.	DESCRIPTION	PARTS NO.	Q'TY	VERSION
C103-C105	MYLAR	0.047 μ F 100 V J D02047306C06	3	
C106	ELECTROLYTIC HS	4700 μ F 50 V M D04047208733	1	
C107	MYLAR	0.047 μ F 100 V J D02047306C06	1	
C108	ELECTROLYTIC SG	2200 μ F 25 V M D04022208420	1	
C109	MYLAR	0.047 μ F 100 V J D02047306C06	1	
C110	ELECTROLYTIC SG	1 μ F 50 V M D04001008710	1	
C111	ELECTROLYTIC SG	2200 μ F 25 V M D04022208420	1	
C112	MYLAR	0.047 μ F 100 V J D02047306C06	1	
C113	ELECTROLYTIC SG	1 μ F 50 V M D04001008710	1	
C114	ELECTROLYTIC SG	1000 μ F 25 V M D04010208420	1	
C115	ELECTROLYTIC SG	1 μ F 50 V M D04001008710	1	
C116	ELECTROLYTIC SG	22 μ F 50 V M D04022208710	1	
C118/C119	MYLAR	0.047 μ F 100 V J D02047306C06	2	
C120	ELECTROLYTIC SG	47 μ F 16 V M D04047008310	1	

CONNECTORS	
CP100	PLUG AC, GSCS-1301 L10402002000 1
CP101	PLUG, JE202B1T4 L10820200042 1 PT INDO
CP102	PLUG, JE202A1T5 L10420200050 1
CP103	PLUG, GIL-S-9P-S2T2 L10122009000 1
CP104	PLUG, 52004-0910 L14052004090 1
CP105	PLUG, 5267-03A L10252670030 1
CP106	PLUG, GIL-S-3P-S2TS L10122003000 1
CP107	PLUG, 5267-02A L10252670020 1
CP108	PLUG, 2P L10233002000 1
CN109	LEAD ASSY, 2P, 200mm L02102203711 1
CP109	PLUG, 5267-02A L10252670020 1
CN404	LEAD ASSY, 8P, 140mm L02108143321 1

DIODES	
D101	ZENER, UZ 4.3BSB K06004R31452 1
D102	SWITCHING, 1N4148M K00041480152 1
D103	ZENER, UZ 6.8BSC K06006R81452 1
D104	ZENER, UZ 27.0BSC K06027002452 1
D105	ZENER, UZ 4.3BSB K06004R31452 1
D106	BRIDGE, D5SBA60 K04705600001 1
D107-D110	RECTIFIER, 1N4003 K04040030052 4
D113/D114	RECTIFIER, 1N4003 K04040030052 2
D117	SWITCHING, 1N4148M K00041480152 1

FUSES	
F101	NB 2.5A, 250V G65025225115 1 K
(F101)	T 2A, 250V G65020225116 1 D,PT INDO
F102	T 3.15A, 250V G65031225116 1 PT INDO(ONLY)
F103/F104	NB 2.5A, 250V G65025225115 2 K
(F103/F104)	T 2.5A, 250V G65025225116 2 D,PT INDO

INTEGRATED CIRCUITS	
IC101	KA7912, REGULATOR J12679120005 1
IC102/IC103	KIA78012AP, REGULATOR J12678012000 2

TRANSISTORS	
Q101	KTA1023, PNP J5001023Y005 1
Q102/Q103	2SC3199Y/BKTC3199Y, NPN J5023199Y005 2
Q104/Q105	KTA966A/KTA1273, PNP J5001273Y005 2

RESISTORS	
R101/R102	CARBON FILM 10 kohm 1/5 W J C00001036P52 2
R103/R104	METAL FILM 22 ohm 1/5 W J C06002206P52 2
R105	METAL FILM 10 ohm 1 W J C06001006552 1
R107	CARBON FILM 6.8 kohm 1/5 W J C00006826P52 1
R108	METAL FILM 4.7 kohm 1/5 W J C06004726P52 1
R109	METAL FILM 1 kohm 1/5 W J C06001026P52 1
R110	METAL FILM 4.7 kohm 1/5 W J C06004726P52 1
R111	METAL FILM 1 kohm 1/5 W J C06001026P52 1
R112	METAL FILM 3.3 Mohm J C06003357453 1

MISCELLANEOUS	
GND1/GND2	TERMINAL GROUND 379004069601 2
RLY1	RELAY, OSA-SS-212DM3 G68012302000 1
11	HEATSINK, REGULATOR TR (H:45) 212004434801 1
12	HEATSINK, REGULATOR TR (H:30) 212004433801 1
14	VOLTAGE SELECTOR, 6P G06004054001 1 PT INDO(ONLY)

PCB4 ASSEMBLY P.C. BOARD FRONT

CAPACITORS	
C200/C201	ELECTROLYTIC SG 10 μ F 50 V M D04010008710 2
C202	ELECTROLYTIC SG 0.047 F 5.5 V M D09047370220 1
C203	ELECTROLYTIC SG 10 μ F 50 V M D04010008710 1
C204	ELECTROLYTIC SG 4.7 μ F 50 V M D0404R708710 1
C205	ELECTROLYTIC SG 100 μ F 10 V M D04010108210 1
C206	ELECTROLYTIC SG 10 μ F 50 V M D04010008710 1
C207	CERAMIC TUBULAR 0.001 μ F 50 V Z D00510207753 1
C208/C209	ELECTROLYTIC SG 4.7 μ F 50 V M D0404R708710 2
C210	MYLAR 0.033 μ F 100 V J D0203306C06 1 K,PT INDO
C211	MYLAR 0.006 μ F 100 V J D02056206C06 1 K,PT INDO
C212	CERAMIC TUBULAR 560 pF 50 V J D00556107753 1 K,PT INDO
C213/C214	ELECTROLYTIC SG 4.7 μ F 50 V M D0404R708710 2 K,PT INDO
C215	CERAMIC TUBULAR 560 pF 50 V J D00556107753 1 K,PT INDO
C216	MYLAR 0.006 μ F 100 V J D02056206C06 1 K,PT INDO
C217/C218	MYLAR 0.047 μ F 100 V J D02047306C06 2 K,PT INDO

REF. NO.	DESCRIPTION	PARTS NO.	Q'TY	VERSION
C219	ELECTROLYTIC SG	0.33 μ F 50 V M D040R3308710	1	K,PT INDO
C220	CERAMIC TUBULAR	10000 pF 16 V J D00510307753	1	K,PT INDO
C221	ELECTROLYTIC SG	0.33 μ F 50 V M D040R3308710	1	K,PT INDO
C222	CERAMIC TUBULAR	10000 pF 16 V J D00510307753	1	K,PT INDO
C223	ELECTROLYTIC SG	47 μ F 16 V M D04047008310	1	K,PT INDO
C224	ELECTROLYTIC SG	10 μ F 50 V M D04010008710	1	
C225/C226	ELECTROLYTIC SG	4.7 μ F 50 V M D0404R708710	2	
C227	ELECTROLYTIC SG	100 μ F 10 V M D04010108210	1	K,PT INDO
C228	ELECTROLYTIC SG	4.7 μ F 50 V M D0404R708710	1	
C229/C230	CERAMIC TUBULAR	4700 pF 16 V J D00547277353	2	
C231	ELECTROLYTIC SG	10 μ F 50 V M D04010008710	1	
C232/C233	MYLAR	0.003 μ F 100 V J D02027206C06	2	
C234	ELECTROLYTIC SG	10 μ F 50 V M D04010008710	1	
C235/C236	CERAMIC TUBULAR	680 pF 50 V J D00568107753	2	
C237	ELECTROLYTIC SG	10 μ F 50 V M D04010008710	1	
C238/C239	CERAMIC TUBULAR	180 pF 50 V K D00518107753	2	
C240	ELECTROLYTIC SG	10 μ F 50 V M D04010008710	1	
C241	ELECTROLYTIC SG	22 μ F 35 V M D04022008510	1	
C242	CERAMIC TUBULAR	10000 pF 16 V J D00510377353	1	
C243	ELECTROLYTIC SG	2.2 μ F 50 V M D0402R208710	1	
C244/C245	CERAMIC TUBULAR	0.022 μ F 25 V Z D00522357453	2	
C246	ELECTROLYTIC SG	4.7 μ F 50 V M D0404R708710	1	
C247	ELECTROLYTIC SG	10 μ F 50 V M D04010008710	1	
C248	CERAMIC DISC CH	20 pF 50 V J D00020016707	1	
C249/C250	CERAMIC TUBULAR	0.022 μ F 25 V Z D00522357453	2	
C251	CERAMIC TUBULAR	0.001 μ F 50 V Z D00510207753	1	
C252	CERAMIC DISC CH	20 pF 50 V J D00020016707	1	
C253/C254	CERAMIC TUBULAR	0.022 μ F 25 V Z D00522357453	2	
C255	CERAMIC TUBULAR	470 pF 50 V J D00547107753	1	
C256/C267	CERAMIC TUBULAR	0.022 μ F 25 V Z D00522357453	2	
C258	ELECTROLYTIC SG	100 μ F 10 V M D04010108210	1	

CONNECTORS	
CN105	LEAD ASSY, 4P, 120mm L02204123332 1
CP101	PLUG, TKC-V10P-A1 L10210002000 1
CP102	PLUG, TKC-V20P-A1 L10220002000 1
CP103	LEAD ASSY, 9P, 120mm L02209123332 1

DIODES	
D200	ZENER, UZ 6.2BSB K06006R21452 1
D201-D205	SWITCHING, 1N4148M K00041480152 5
D206	ZENER, UZ 5.1BSB K06005R11452 1 K,PT INDO
D207	SWITCHING, 1N4148M K00041480152 1
D208	ZENER, UZ 7.5BSC K06007R52452 1
D209-D215	SWITCHING, 1N4148M K00041480152 7
D216	ZENER, UZ 5.1BSB K06005R11452 1
D217	ZENER, UZ 9.1BSC K06009R12452 1
D218	SWITCHING, 1N4148M K00041480152 1
LED201/202	LED, SR3511-U, RED K50908150101 2

INTEGRATED CIRCUITS	
IC200	CXP 82440A-151Q, DWP463 J02082440151 1
IC201	ES 56028, DIGITAL ECHO J08356020000 1 K

REF. NO.	DESCRIPTION	PARTS NO.	Q'TY	VERSION
R248	METAL FILM	560 ohm 1/5 W	J C06005616P52	1
R249	CARBON FILM	18 kohm 1/5 W	J C00001836P52	1
R250	CARBON FILM	15 kohm 1/5 W	J C00001536P52	1
R251	CARBON FILM	10 kohm 1/5 W	J C00001036P52	1 K,PT INDO
R252	CARBON FILM	15 kohm 1/5 W	J C00001536P52	1
R253	CARBON FILM	8.2 kohm 1/5 W	J C00008226P52	1 K,PT INDO
R254	METAL FILM	3.3 kohm 1/5 W	J C06003326P52	1 K,PT INDO
R255/R256	CARBON FILM	10 kohm 1/5 W	J C00001036P52	2 K,PT INDO
R257	METAL FILM	3.3 kohm 1/5 W	J C06003326P52	1 K,PT INDO
R258	CARBON FILM	15 kohm 1/5 W	J C00001536P52	1 K,PT INDO
R259	CARBON FILM	10 kohm 1/5 W	J C00001036P52	1 K,PT INDO
R260	CARBON FILM	15 kohm 1/5 W	J C00001536P52	1 K,PT INDO
R261	CARBON FILM	75 kohm 1/5 W	J C00007536P52	1 K,PT INDO
R262/R263	CARBON FILM	6.8 kohm 1/5 W	J C00006826P52	2 K,PT INDO
R264	CARBON FILM	75 kohm 1/5 W	J C00007536P52	1 K,PT INDO
R265	CARBON FILM	27 kohm 1/5 W	J C00002736P52	1 K,PT INDO
R266	METAL FILM	100 ohm 2 W	J C060010166S2	1 K,PT INDO
R267	METAL FILM	4.7 kohm 1/5 W	J C06004726P52	1
R268	CARBON FILM	5.6 kohm 1/5 W	J C00005626P52	1
R269-R274	CARBON FILM	47 kohm 1/5 W	J C00004736P52	6
R275	CARBON FILM	680 kohm 1/5 W	J C00006846P52	1
R276	METAL FILM	470 ohm 1/5 W	J C06004716P52	1
R277	CARBON FILM	12 kohm 1/5 W	J C00001236P52	1
R278	CARBON FILM	10 kohm 1/5 W	J C00001036P52	1
R279	CARBON FILM	12 kohm 1/5 W	J C00001236P52	1
R280	CARBON FILM	120 kohm 1/5 W	J C00001246P52	1
R281	CARBON FILM	470 kohm 1/5 W	J C00004746P52	1
R282	CARBON FILM	5.6 kohm 1/5 W	J C00005626P52	1
R283	CARBON FILM	10 kohm 1/5 W	J C00001036P52	1
R284	CARBON FILM	100 kohm 1/5 W	J C00001046P52	1
R285	CARBON FILM	390 kohm 1/5 W	J C00003946P52	1
R286	CARBON FILM	5.6 kohm 1/5 W	J C00005626P52	1
R287	CARBON FILM	12 kohm 1/5 W	J C00001236P52	1
R288	CARBON FILM	68 kohm 1/5 W	J C00006836P52	1
R289	CARBON FILM	390 kohm 1/5 W	J C00003946P52	1
R290	CARBON FILM	5.6 kohm 1/5 W	J C00005626P52	1
R291	CARBON FILM	47 kohm 1/5 W	J C00004736P52	1
R292	CARBON FILM	68 kohm 1/5 W	J C00006836P52	1
R293	CARBON FILM	680 kohm 1/5 W	J C00006846P52	1
R294	CARBON FILM	5.6 kohm 1/5 W	J C00005626P52	1
R295	METAL FILM	330 ohm 1/5 W	J C06003316P52	1
R296	CARBON FILM	12 kohm 1/5 W	J C00001236P52	1
R297	CARBON FILM	120 kohm 1/5 W	J C00001246P52	1
R298	CARBON FILM	2.2 Mohm 1/5 W	J C00002256P52	1
R299	METAL FILM	330 ohm 1/5 W	J C06003316P52	1
R300	CARBON FILM	10 kohm 1/5 W	J C00001036P52	1
R301	CARBON FILM	1 Mohm 1/5 W	J C00001056P52	1
R302	CARBON FILM	10 kohm 1/5 W	J C00001036P52	1
R303	METAL FILM	1.8 kohm 1/5 W	J C06001826P52	1
R304	METAL FILM	5.6 kohm 1/5 W	J C06005626P52	1
R305	METAL FILM	1 kohm 1/5 W	J C06001026P52	1
R306	METAL FILM	1.5 kohm 1/5 W	J C06001526P52	1
R307	METAL FILM	1.8 kohm 1/5 W	J C06001826P52	1
R308	METAL FILM	2.4 kohm 1/5 W	J C06002426P52	1
R309	METAL FILM	1.8 kohm 1/5 W	J C06001826P52	1
R310	CARBON FILM	5.1 kohm 1/5 W	J C00005126P52	1
R311/R312	CARBON FILM	18 kohm 1/5 W	J C00001836P52	2
R313	METAL FILM	1 kohm 1/5 W	J C06001026P52	1
R314	METAL FILM	1.5 kohm 1/5 W	J C06001526P52	1
R315	METAL FILM	1.8 kohm 1/5 W	J C06001826P52	1
R316	METAL FILM	2.4 kohm 1/5 W	J C06002426P52	1
R317	CARBON FILM	18 kohm 1/5 W	J C00001836P52	1
R318	METAL FILM	56 ohm 1/5 W	J C06005606P52	1
MISCELLANEOUS				
RESO200	RESONATOR, CST10.0MTW-TF01	E8301000005	1	
RMC201	REMOTE SENSOR, TFMT5380(38KHz)	E94053800000	1	
SW200	SWITCH, SKHV10910D01 KB581, AUDIO	G18004050001	1	D
SW201	SWITCH, SKHV10910D01 KB581, VIDEO	G18004050001	1	D
SW202	SWITCH, SKHV10910D01 KB581, SURROUND	G18004050001	1	
SW203	SWITCH, SKHV10910D01 KB581, MODE	G18004050001	1	
SW204	SWITCH, SKHV10910D01 KB581, VOLUME-UP	G18004050001	1	
SW205	SWITCH, SKHV10910D01 KB581, VOLUME-DOWN	G18004050001	1	
SW206	SWITCH, SKHV10910D01 KB581, TUNE MODE	G18004050001	1	
SW207	SWITCH, SKHV10910D01 KB581, MEM/SET	G18004050001	1	
SW208	SWITCH, SKHV10910D01 KB581, POWER	G18004050001	1	
SW209	SWITCH, SKHV10910D01 KB581, X-BASS	G18004050001	1	
SW210	SWITCH, SKHV10910D01 KB581, DISP	G18004050001	1	D
SW211	SWITCH, SKHV10910D01 KB581, PTY	G18004050001	1	D
SW212	SWITCH, SKHV10910D01 KB581, AF	G18004050001	1	D
SW213	SWITCH, SKHV10910D01 KB581, RDS	G18004050001	1	D
SW214	SWITCH, SKHV10910D01 KB581	G18004050001	1	
SW215	SWITCH, SKHV10910D01 KB581, INPUT	G18004050001	1	K,PT INDO
7(VR201)	VOLUME MIC, RK09K1130205-50KB	C45111530220	1	
9(VR202)	SWITCH, ROTARY ENCODER	C49004106001	1	
XT200	CRYSTAL, MX-38T (32.768KHz)	E80032768005	1	
FL	FL DISPLAY, 14BMMW8R	K53000170001	1	
7(VR201)	VOLUME MIC, RK09K1130205-50KB	C45111530220	1	
9(VR202)	SWITCH, ROTARY ENCODER	C49004106001	1	
10	GUIDE HOLDER, FL	432004081101	1	

REF. NO.	DESCRIPTION	PARTS NO.	Q'TY	VERSION
PCB5 ASSEMBLY P.C BOARD KEY SWITCH				
R370	METAL FILM	1.8 kohm 1/5 W	J C06001826P52	1
R371	CARBON FILM	5.1 kohm 1/5 W	J C00005126P52	1
R372-R374	CARBON FILM	18 kohm 1/5 W	J C00001836P52	3
CN104	LEAD ASSY, 2P, 80mm	L02102082632	1	
SW370	SWTCH, SKHV10910D01 KB581, BAND	G18004050001	1	
SW371	SWTCH, SKHV10910D01 KB581, FM MODE	G18004050001	1	
SW372	SWTCH, SKHV10910D01 KB581, CLOCK	G18004050001	1	
SW373	SWTCH, SKHV10910D01 KB581, TIMER	G18004050001	1	
PCB6 ASSEMBLY P.C BOARD MIC				
D381	SWITCHING, 1N4148M	K00041480152	1	
R380	METAL FILM	3.3 kohm 1/5 W	J C06003326P52	1
R381	CARBON FILM	10 kohm 1/5 W	J C00001036P52	1
39(JACK380)	JACK, HTJ064-05B	G40204022193	1	
CP105	PLUG, GIL-S-4P-S2T2	L10122004000	1	
PCB7 ASSEMBLY P.C BOARD MAIN				
CAPACITORS				
C401	ELECTROLYTIC SG	4.7 μ F 50 V	M D0404R708710	1
C402/C403	CERAMIC TUBULAR	820 pF 50 V	J D00582107753	2
C404	CERAMIC TUBULAR	20 pF 50 V	J D00520006753	1
C405	CERAMIC TUBULAR	27 pF 50 V	J D00127006753	1
C406/C407	CERAMIC TUBULAR	3.3 pF 50 V	J D0013R307753	2
C408	ELECTROLYTIC SG	47 μ F 16 V	M D04047008310	1
C409	CERAMIC TUBULAR	220 pF 50 V	J D00522107753	1
C410	ELECTROLYTIC SG	10 μ F 35 V	M D04010008510	1
C412	MYLAR	0.047 μ F 100 V	J D02047306C06	1
C413	ELECTROLYTIC SG	0.1 μ F 50 V	M D040R1008710	1
C414	ELECTROLYTIC SG	4.7 μ F 50 V	M D0404R708710	1
C415/C416	CERAMIC TUBULAR	820 pF 50 V	J D00582107753	2
C417	CERAMIC TUBULAR	20 pF 50 V	J D00520006753	1
C418	ELECTROLYTIC SG	47 μ F 16 V	M D04047008310	1
C419	CERAMIC TUBULAR	27 pF 50 V	J D00127006753	1
C420/C421	CERAMIC TUBULAR	3.3 pF 50 V	J D0013R307753	2
C422	CERAMIC TUBULAR	220 pF 50 V	J D00522107753	1
C423	ELECTROLYTIC SG	10 μ F 35 V	M D04010008510	1
C425	MYLAR	0.047 μ F 100 V	J D02047306C06	1
C426	ELECTROLYTIC SG	0.1 μ F 50 V	M D040R1008710	1
C427	ELECTROLYTIC SG	100 μ F 16 V	M D04010108310	1
C428	ELECTROLYTIC AU	470 μ F 6.3 V	M D04647108110	1
C430	ELECTROLYTIC SG	10 μ F 35 V	M D04010008510	1
C433/C434	ELECTROLYTIC SG	1 μ F 100 V	M D04001008C10	2
CONNECTORS				
CN405	LEAD ASSY, 2P, 240mm	L02102243711	1	
CP401	PLUG, GIL-05P-S2L2-EF	L10122005001	1	
CP404	PLUG, 5268-08A	L10252680080	1	
DIODES				
D401-D408	SWITCHING, 1N4148M	K00041480152	8	
D411	ZENER, UZ 33.0BSC	K06033003452	1	
COILS				
L401/L402	INDUCTOR, 0.5UH	D33090000132	2	
TRANSISTORS				
Q401	DTC323TS	J602323TS005	1	
Q402/Q403	KTC2240/BKTC3200, NPN	J50232008005	2	
Q404/Q405	2SC1740S	J5021740Y005	2	
Q406	KTA1024, PNP	J5001024Y005	1	
Q407	KTC3206, NPN	J5023206Y005	1	
Q408	2SC1740S	J5021740Y005	1	
Q409	KSC2690A-Y, NPN	J5022690Y000	1	
Q410	KSA1220A-Y, PNP	J5001220Y000	1	
Q411	2SC3853, NPN	J5023853Y000	1	
Q412	2SA1489, PNP	J5001489Y000	1	
Q413/Q414	2SC1740S	J5021740Y005	2	
Q415	DTC323TS	J602323TS005	1	
Q416/Q417	KTC2240/BKTC3200, NPN	J50232008005	2	
Q418/Q419	2SC1740S	J5021740Y005	2	
Q420	KTA1024, PNP	J5001024Y005	1	
Q421	KTC3206, NPN	J5023206Y005	1	
Q422	2SC1740S	J5021740Y005	1	
Q423	KSC2690A-Y, NPN	J5022690Y000	1	
Q424	KSA1220A-Y, PNP	J5001220Y000	1	
Q425	2SC3853, NPN	J5023853Y000	1	
Q426	2SA1489, PNP	J5001489Y000	1	
Q427	BKTA1266, PNP	J5001266Y005	1	
Q428/Q429	2SC1740S	J5021740Y005	2	
Q430	DTC114YS	J60201140005	1	
Q431	KRA107M/DTA114YS	J601107M0005	1	
Q432	BKTA1266, PNP	J5001266Y005	1	
RESISTORS				
R401	METAL FILM	1 kohm 1/5 W	J C06001026P52	1
R402	CARBON FILM	39 kohm 1/5 W	J C00003936P52	1
R403	METAL FILM	680 ohm 1/5 W	J C06006816P52	1
R404/R405	METAL FILM	1 kohm 1/5 W	J C06001026P52	2
R406/R407	METAL FILM	4.7 kohm 1/5 W	J C06004726P52	2
R408/R409	METAL FILM	1 kohm 1/5 W	J C06001026P52	2

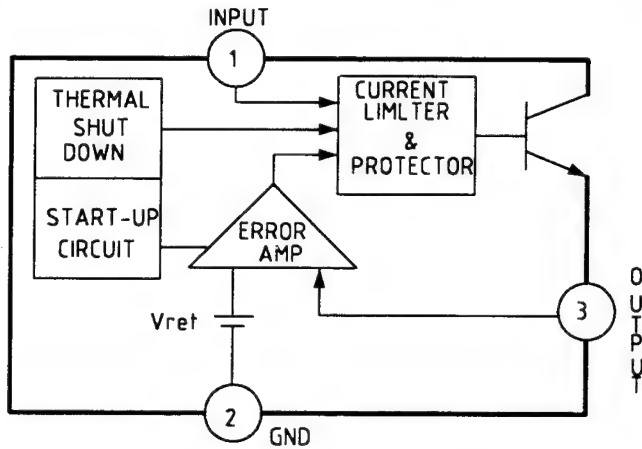
REF. NO.	DESCRIPTION	PARTS NO.	Q'TY	VERSION		
R410	CARBON FILM	10 kohm 1/5 W	J C00001036P52	1		
R411	METAL FILM	2.7 kohm 1/5 W	J C06002726P52	1		
R412	CARBON FILM	39 kohm 1/5 W	J C00003936P52	1		
R413	METAL FILM	120 ohm 1/5 W	J C06001216P52	1		
R414	METAL FILM	820 ohm 1/5 W	J C06008216P52	1		
R415	CARBON FILM	3 kohm 1/5 W	J C00003026P52	1		
R416	METAL FILM	1.8 kohm 1/5 W	J C06001826P52	1		
R417	METAL FILM	1 kohm 1/5 W	J C06001026P52	1		
R418	METAL FILM	120 ohm 1/5 W	J C06001216P52	1		
R419	METAL FILM	3.3 kohm 1/5 W	J C06003326P52	1		
R420	CARBON FILM	100 kohm 1/5 W	J C00001046P52	1		
R421	METAL FILM	330 ohm 1/5 W	J C06003316P52	1		
R422	CEMENT	0.39 ohm 5 W	J C144R3906930	1		
R423	METAL FILM	390 ohm 1/5 W	J C06003916P52	1		
R424	METAL FILM	4.7 kohm 1/5 W	J C06004726P52	1		
R425	CARBON FILM	15 kohm 1/5 W	J C00001536P52	1		
R426/R427	METAL FILM	22 ohm 1/5 W	J C06002206P52	2		
R428	CARBON FILM	24 kohm 1/5 W	J C00002436P52	1		
R429	METAL FILM	1 kohm 1/5 W	J C06001026P52	1		
R430	CARBON FILM	39 kohm 1/5 W	J C00003936P52	1		
R431	METAL FILM	680 ohm 1/5 W	J C06006816P52	1		
R432-R435	METAL FILM	1 kohm 1/5 W	J C06001026P52	4		
R436	CARBON FILM	10 kohm 1/5 W	J C00001036P52	1		
R437	METAL FILM	2.7 kohm 1/5 W	J C06002726P52	1		
R438	CARBON FILM	39 kohm 1/5 W	J C00003936P52	1		
R439	METAL FILM	120 ohm 1/5 W	J C06001216P52	1		
R440	METAL FILM	820 ohm 1/5 W	J C06008216P52	1		
R441	CARBON FILM	3 kohm 1/5 W	J C00003026P52	1		
R442	METAL FILM	1.8 kohm 1/5 W	J C06001826P52	1		
R443	METAL FILM	1 kohm 1/5 W	J C06001026P52	1		
R444	METAL FILM	120 ohm 1/5 W	J C06001216P52	1		
R445	METAL FILM	3.3 kohm 1/5 W	J C06003326P52	1		
R446	CARBON FILM	100 kohm 1/5 W	J C00001046P52	1		
R447	METAL FILM	330 ohm 1/5 W	J C06003316P52	1		
R448	CEMENT	0.39 ohm 5 W	J C144R3906930	1		
R449	METAL FILM	390 ohm 1/5 W	J C06003916P52	1		
R450	METAL FILM	4.7 kohm 1/5 W	J C06004726P52	1		
R451	CARBON FILM	15 kohm 1/5 W	J C00001536P52	1		
R452/R453	METAL FILM	22 ohm 1/5 W	J C06002206P52	2		
R454	CARBON FILM	24 kohm 1/5 W	J C00002436P52	1		
R458	CARBON FILM	10 kohm 1/5 W	J C00001036P52	1		
R459	CARBON FILM	47 kohm 1/5 W	J C00004736P52	1		
R460	METAL FILM	1 kohm 1/5 W	J C06001026P52	1		
R461	METAL FILM	1.5 kohm 1/5 W	J C06001526P52	1		
R462	CARBON FILM	10 kohm 1/5 W	J C00001036P52	1		
R463	METAL FILM	4.7 kohm 1/5 W	J C06004726P52	1		
R464	CARBON FILM	47 kohm 1/5 W	J C00004736P52	1		
R466	METAL FILM	1 kohm 1/5 W	J C06001026P52	1		
R467	CARBON FILM	22 kohm 1/5 W	J C00002236P52	1		
MISCELLANEOUS						
GND1	TERMINAL GROUND	379004069601	1			
PCB#	ASSEMBLY P.C. BOARD INPUT					
CAPACITORS						
C501/LR	CERAMIC TUBULAR	100 pF	50 V	J D00110107753	2	D(ONLY)
C503	CERAMIC TUBULAR	100 pF	50 V	J D00110107753	1	
C504	ELECTROLYTIC SG	1 μF	50 V	M D04001008710	1	
C505/C506	ELECTROLYTIC SG	47 μF	35 V	M D04047008510	2	
C507/LR	CERAMIC TUBULAR	100 pF	50 V	J D00110107753	2	
C508/LR	ELECTROLYTIC SG	4.7 μF	50 V	M D0404R708710	2	
C509/LR	CERAMIC TUBULAR	100 pF	50 V	J D00110107753	2	
C510/C511	ELECTROLYTIC SG	47 μF	35 V	M D04047008510	2	
C512/LR	ELECTROLYTIC SG	4.7 μF	50 V	M D0404R708710	2	
C513	ELECTROLYTIC SG	2.2 μF	50 V	M D0402R208710	1	
C514-C517	MYLAR	0.1 μF	63 V	K D02010407806	4	
C518/LR	ELECTROLYTIC SG	4.7 μF	50 V	M D0404R708710	2	
C519/C520	MYLAR	0.002 μF	100 V	J D02022206C06	2	
C521	ELECTROLYTIC SG	2.2 μF	50 V	M D0402R208710	1	
C522	ELECTROLYTIC SG	22 μF	35 V	M D04022008510	1	
C523	ELECTROLYTIC SG	47 μF	35 V	M D04047008510	1	
C524/LR	ELECTROLYTIC SG	4.7 μF	50 V	M D0404R708710	2	
C525/LR	CERAMIC TUBULAR	220 pF	50 V	J D00522107753	2	
C526	MYLAR	0.1 μF	63 V	K D02010407806	1	
C527/C528	ELECTROLYTIC SG	47 μF	35 V	M D04047008510	2	
C529/LR	ELECTROLYTIC SG	4.7 μF	50 V	M D0404R708710	2	
C530/LR	ELECTROLYTIC SG	4.7 μF	50 V	M D0404R708710	2	
C531/LR	CERAMIC TUBULAR	560 pF	50 V	J D00556107753	2	
C532/LR	CERAMIC TUBULAR	560 pF	50 V	J D00556107753	2	
C533/C534	ELECTROLYTIC SG	47 μF	35 V	M D04047008510	2	
C535	MYLAR	0.1 μF	63 V	K D02010407806	1	
C537/C538	CERAMIC TUBULAR	100 pF	50 V	J D00110107753	2	
C539-C541	CERAMIC TUBULAR	0.01 μF	16 V	Z D00510377353	3	
C751/LR	ELECTROLYTIC SG	4.7 μF	50 V	M D0404R708710	2	
C752/LR	ELECTROLYTIC SG	4.7 μF	50 V	M D0404R708710	2	
C753/LR	ELECTROLYTIC SG	4.7 μF	50 V	M D0404R708710	2	
C754	MYLAR	0.47 μF	63 V	K D02047407806	1	
CONNECTORS						
CP1	LEAD ASSY, 11P, 80mm	L02111083131	1	K,PT INDO		
(CP1)	LEAD ASSY, 15P, 80mm	L02115083131	1	D		

REF. NO.	DESCRIPTION	PARTS NO.	Q'TY	VERSION
CP102	PLUG, TKC0V20X-A1	L10220002001	1	
CP101	SOCKET BTB, TKC-V10X-A1	L10210002001	1	
CN106	LEAD ASS'Y, 3P, 160mm	L02203163332	1	
CN504	LEAD ASS'Y, 4P, 200mm	L02204203332	1	
CP501	PLUG, 52004-1110	L14052004110	1	
CN401	LEAD ASS'Y, 5P, 160mm	L02205163332	1	
DIODES				
D501	SWITCHING, 1N4148M	K00041480152	1	
D502	ZENER, UZ 9.1BSC	K06009R12452	1	
INTEGRATED CIRCUITS				
IC 501	LC7821	J08078210000	1	
IC 502	KIA4559P/KIA75559P	J12145590001	1	
IC 503	TDA7313D	J08473130000	1	
IC 504	KIA4559P/KIA75559P	J12145590001	1	
IC505	KIA4559S/KIA75559S	J12145590000	1	
IC751	HYBRID, SRS3D2SW	J10032000000	1	
TRANSISTORS				
Q502/LR	KTC3198, NPN	J5023198B005	2	
Q504	KRA107M/DTA114YS	J601107M0005	1	
Q505	FET, 2SK117Y	J5441170Y005	1	
Q506	DTC114YS	J60201140005	1	
Q507	KRA107M/DTA114YS	J601107M0005	1	
Q508/LR	DTC323TL	J502323TL005	2	
RESISTORS				
R501/LR	METAL FILM	1 kohm 1/5 W J C06001026P52	2	
R502/LR	METAL FILM	3.3 kohm 1/5 W J C06003326P52	2	
R503-R505	METAL FILM	1 kohm 1/5 W J C06001026P52	3	
R506	CARBON FILM	100 kohm 1/5 W J C00001046P52	2	
R507/R508	METAL FILM	47 ohm 1/5 W J C06004706P52	2	
R509/LR	CARBON FILM	100 kohm 1/5 W J C00001046P52	2	
R510/LR	METAL FILM	3.3 kohm 1/5 W J C06003326P52	2	
R511/LR	CARBON FILM	470 kohm 1/5 W J C00004746P52	2	
R512	METAL FILM	47 ohm 1/5 W J C06004706P52	1	
R512/LR	METAL FILM	4.7 kohm 1/5 W J C06004726P52	2	
R513	METAL FILM	47 ohm 1/5 W J C06004706P52	1	
R514/LR	CARBON FILM	100 kohm 1/5 W J C00001046P52	2	
R515/LR	METAL FILM	1 kohm 1/5 W J C06001026P52	2	
R519/R519	METAL FILM	1 kohm 1/5 W J C06001026P52	2	
R520/R521	CARBON FILM	6.8 kohm 1/5 W J C00006826P52	2	
R522/LR	CARBON FILM	100 kohm 1/5 W J C00001046P52	2	
R523	METAL FILM	3.3 kohm 1/5 W J C06003326P52	1	
R524	CARBON FILM	1 Mohm 1/5 W J C00001056P52	1	
R525/LR	METAL FILM	1 kohm 1/5 W J C06001026P52	2	
R526/LR	CARBON FILM	5.6 kohm 1/5 W J C00005626P52	2	
R527/LR	CARBON FILM	100 kohm 1/5 W J C00001046P52	2	
R529/LR	METAL FILM	1 kohm 1/5 W J C06001026P52	2	
R530/R531	METAL FILM	47 ohm 1/5 W J C06004706P52	2	
R532/LR	CARBON FILM	10 kohm 1/5 W J C00001036P52	2	
R533/LR	CARBON FILM	100 kohm 1/5 W J C00001046P52	2	
R534/LR	CARBON FILM	10 kohm 1/5 W J C00001036P52	2	
R535/LR	METAL FILM	3.9 kohm 1/5 W J C06003926P52	2	
R536/LR	METAL FILM	10 ohm 1/5 W J C06001006P52	2	
R537/R538	METAL FILM	47 ohm 1/5 W J C06004706P52	2	
R539	METAL FILM	220 ohm 1/5 W J C06002216P52	1	
R540/LR	METAL FILM	4.7 kohm 1/5 W J C06004726P52	2	
R541	CARBON FILM	2.2 Mohm 1/5 W J C00002256P52	1	
R751/LR	CARBON FILM	220 kohm 1/5 W J C00002246P52	2	
R752/LR	CARBON FILM	100 kohm 1/5 W J C00001046P52	2	
R753/LR	METAL FILM	4.7 kohm 1/5 W J C06004726P52	2	
R754	METAL FILM	1 kohm 1/5 W J C06001026P52	1	
R754/LR	CARBON FILM	100 kohm 1/5 W J C00001046P52	2	
R755	METAL FILM	1 kohm 1/5 W J C06001026P52	1	
R756	CARBON FILM	620 ohm 1/5 W J C00006216P52	1	
MISCELLANEOUS				
26	GROUND PLAT	307004552601	1	
30	JACK RCA, 2P	G60120044001	1	
PCB9 ASSEMBLY P.C.BOARD HEADPHONE				
C542	CAP, CERAMIC TUBULAR	0.01 μ F 16 V Z D00510377353	1	
C535/LR	CAP, CERAMIC TUBULAR	0.022 μ F 25 V Z D00522357453	2	
C536	CAP, CERAMIC TUBULAR	0.022 μ F 25 V Z D00522357453	1	
CP504	CNT PLUG, GIL-04P-S2L2-EF	L10122004001	1	
D504	SWITCHING, 1N4148M	K00041480152	1	
R539/LR	RES, METAL FILM	4.7 ohm 1/5 W J C06004706P52	2	
6	JACK, HTJ064-05B	G40204022193	1	

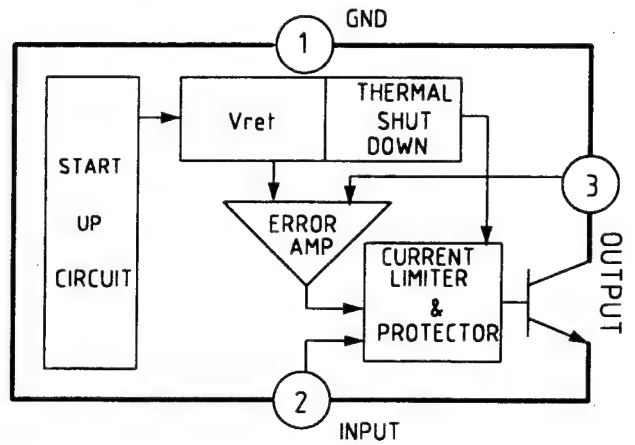
※ OLD PART NO.

IC'S FUNCTIONAL BLOCK DIAGRAM

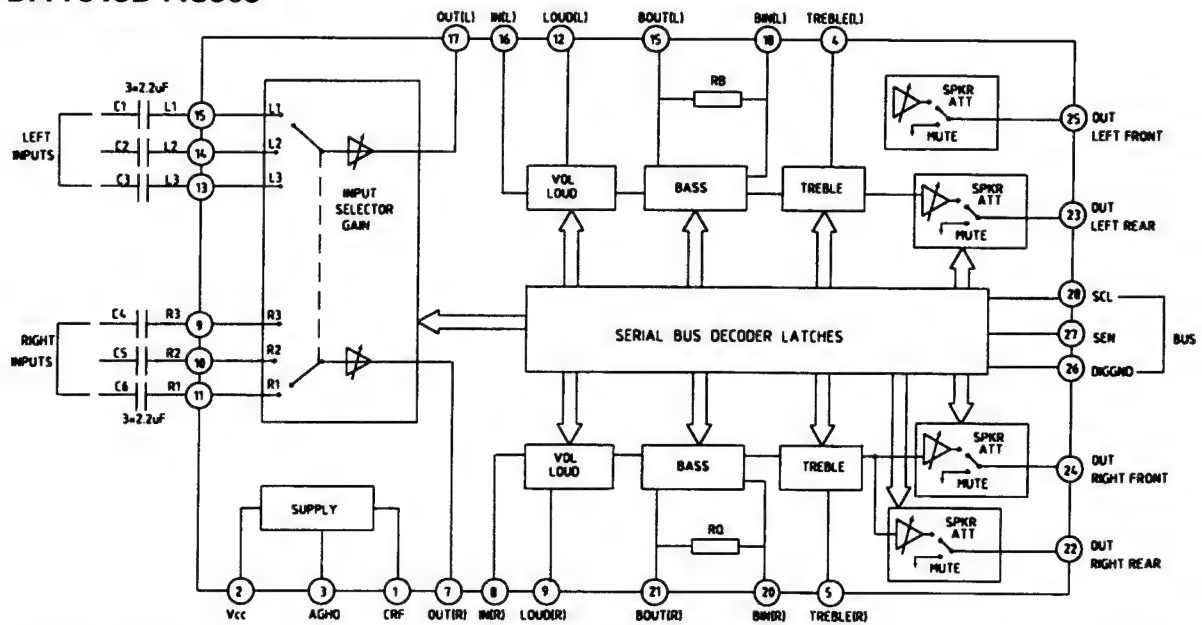
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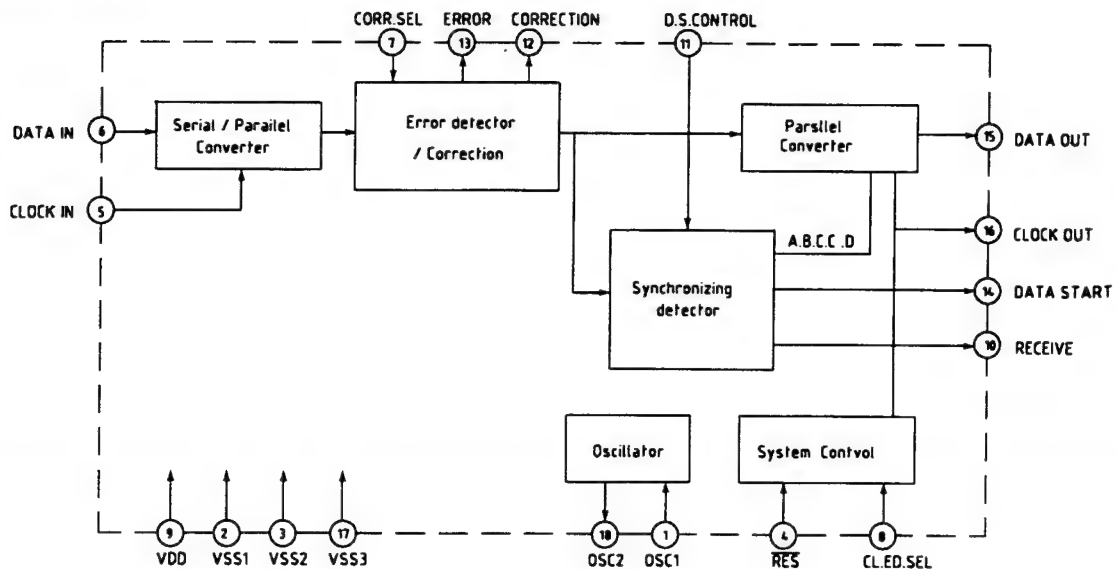
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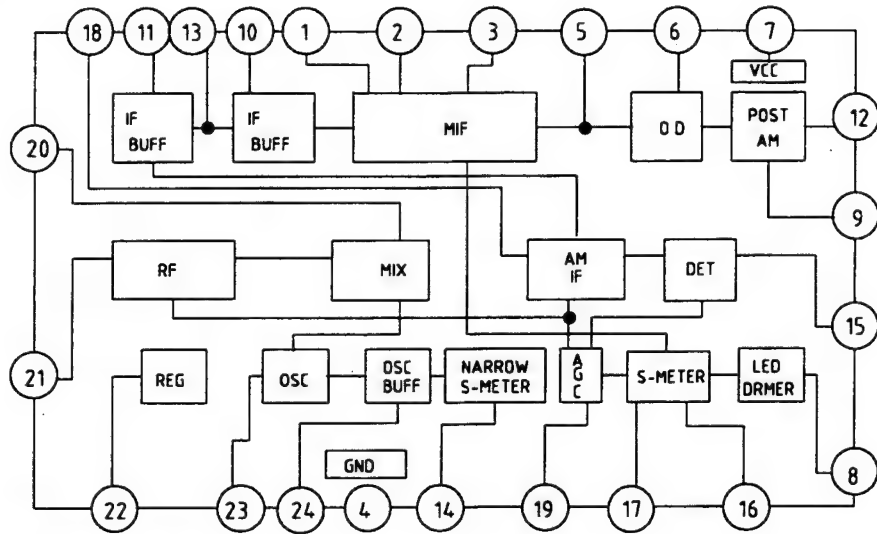
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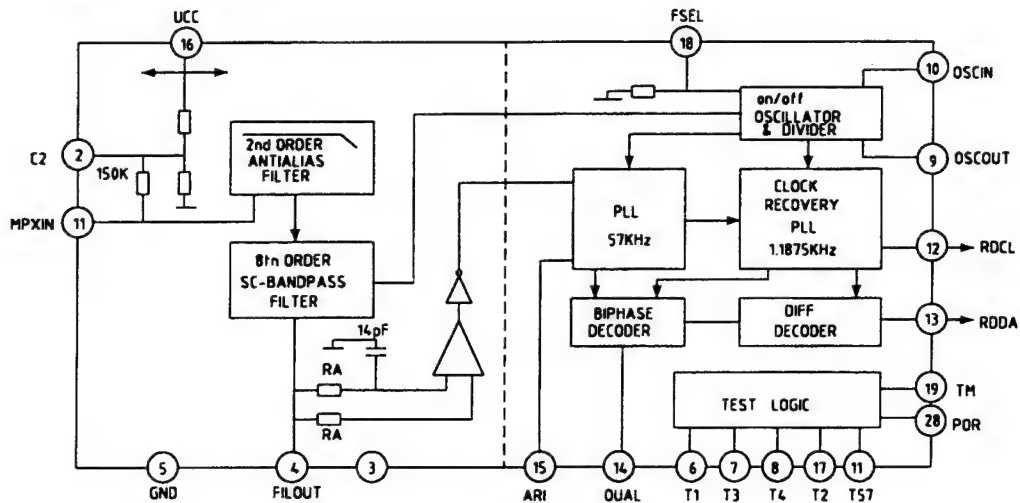
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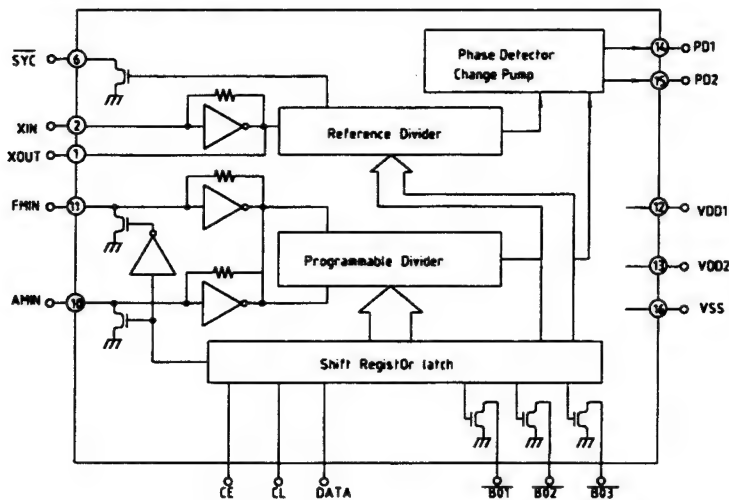
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TDA 7330B : IC4

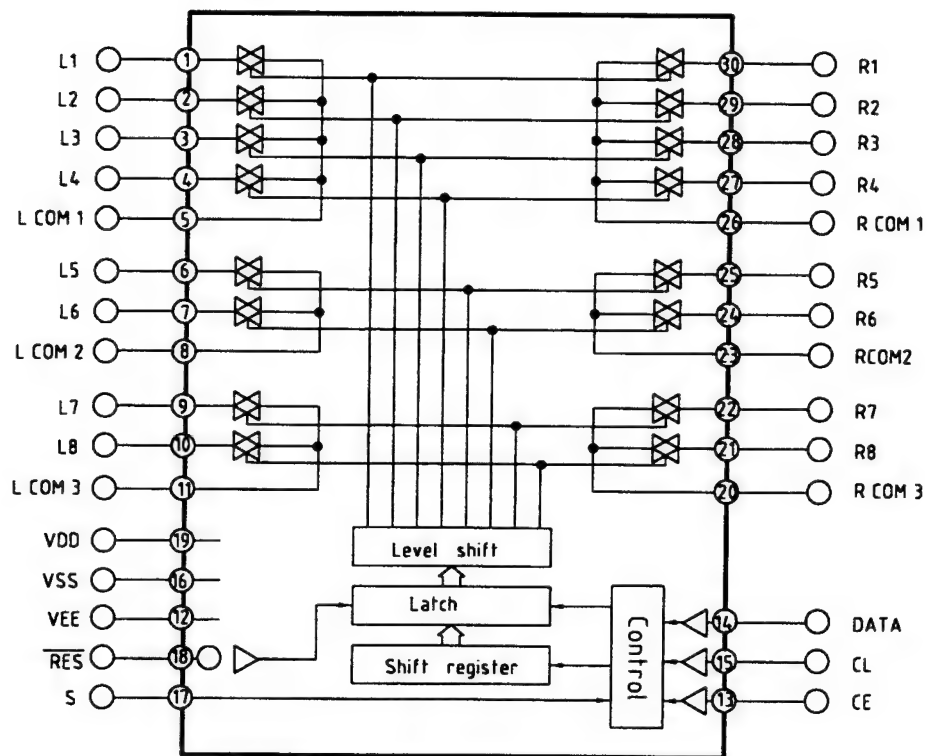


LM 7001 M : IC1

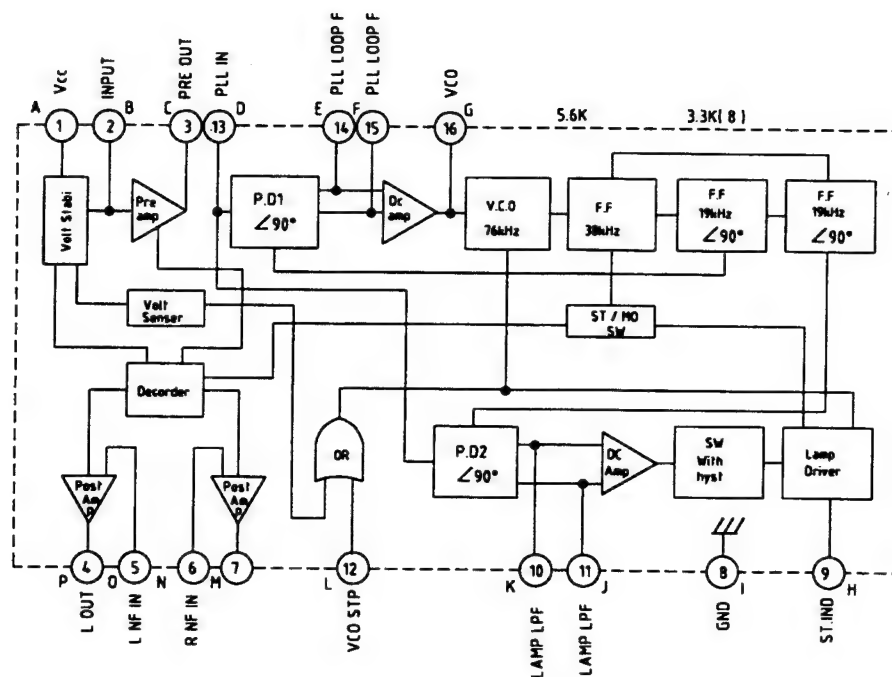


No	LM 7001	LM7001M
1	XOUT	XOUT
2	XIN	XIN
3	CE	NC
4	CL	CE
5	DATA	CL
6	SYC	DATA
7	BDT	SYC
8	BDT	BDT
9	BDT	BDT
10	AMIN	BDT
11	FMIN	NC
12	VDD1	AMIN
13	VDD2	NC
14	PD1	FMIN
15	PD2	NC
16	VSS	VDD1
17		VDD2
18		PD1
19		PD2
20		VSS

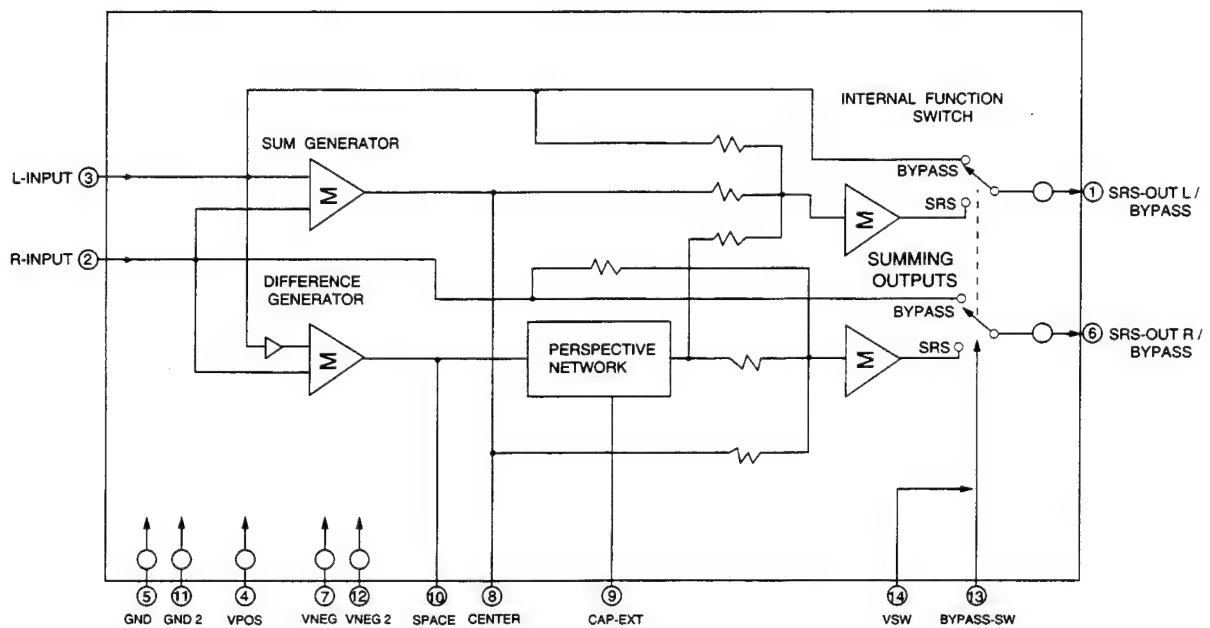
LC 7821 : IC501



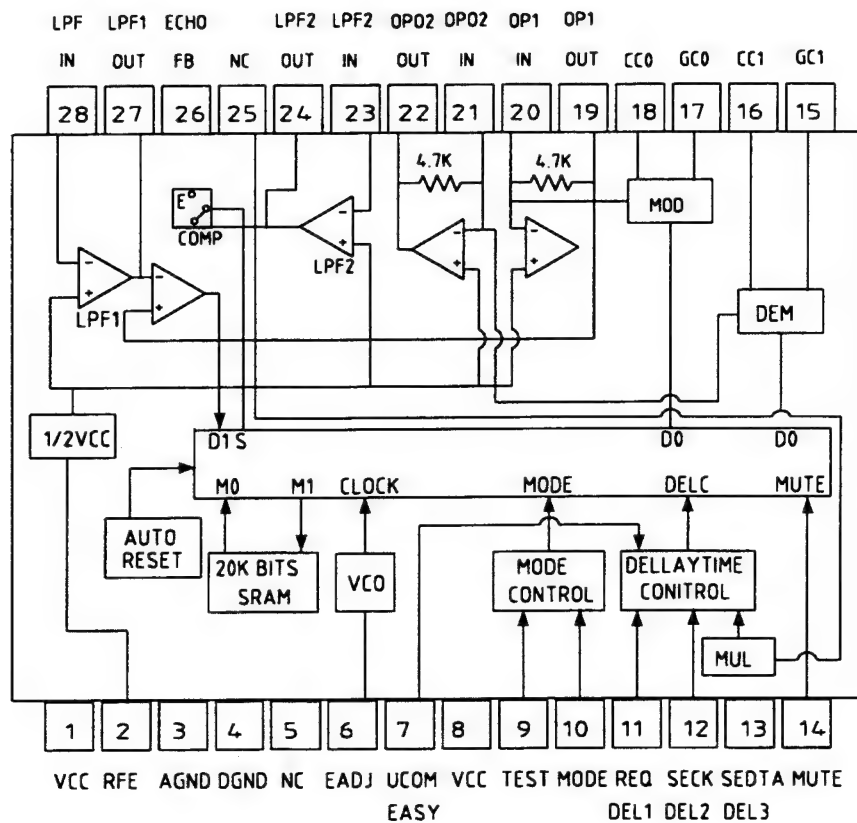
HA 12016 : IC3



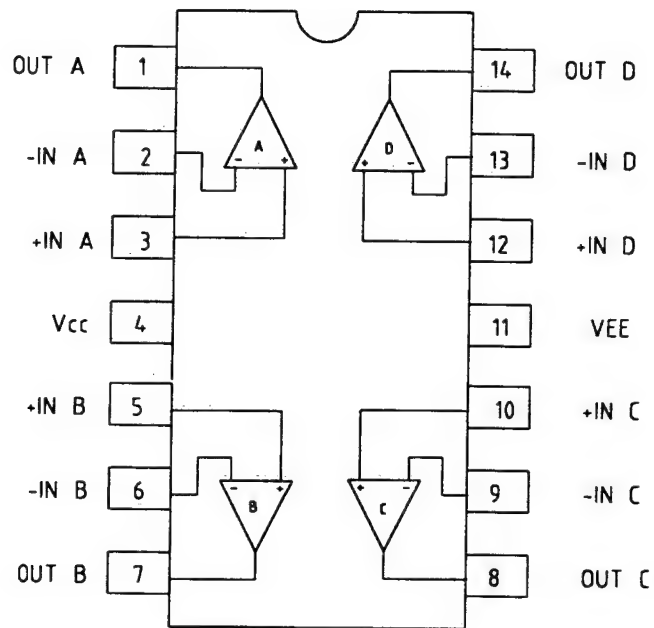
SRS 3D2 SW : IC751



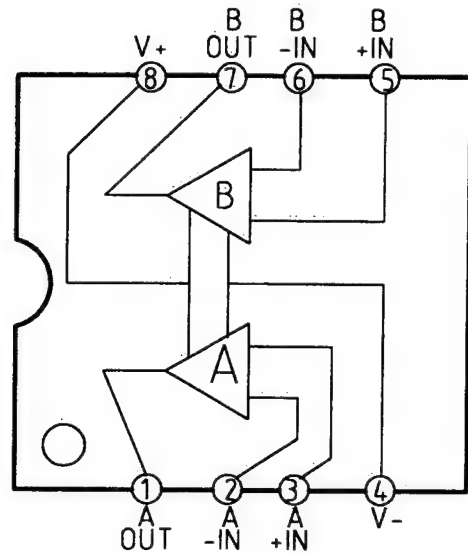
ES 56028 : IC201



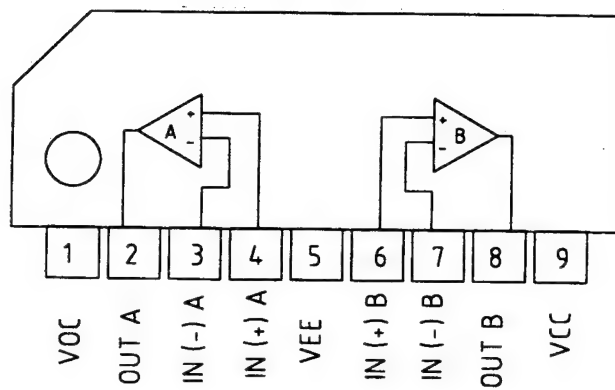
KA 324 : IC203



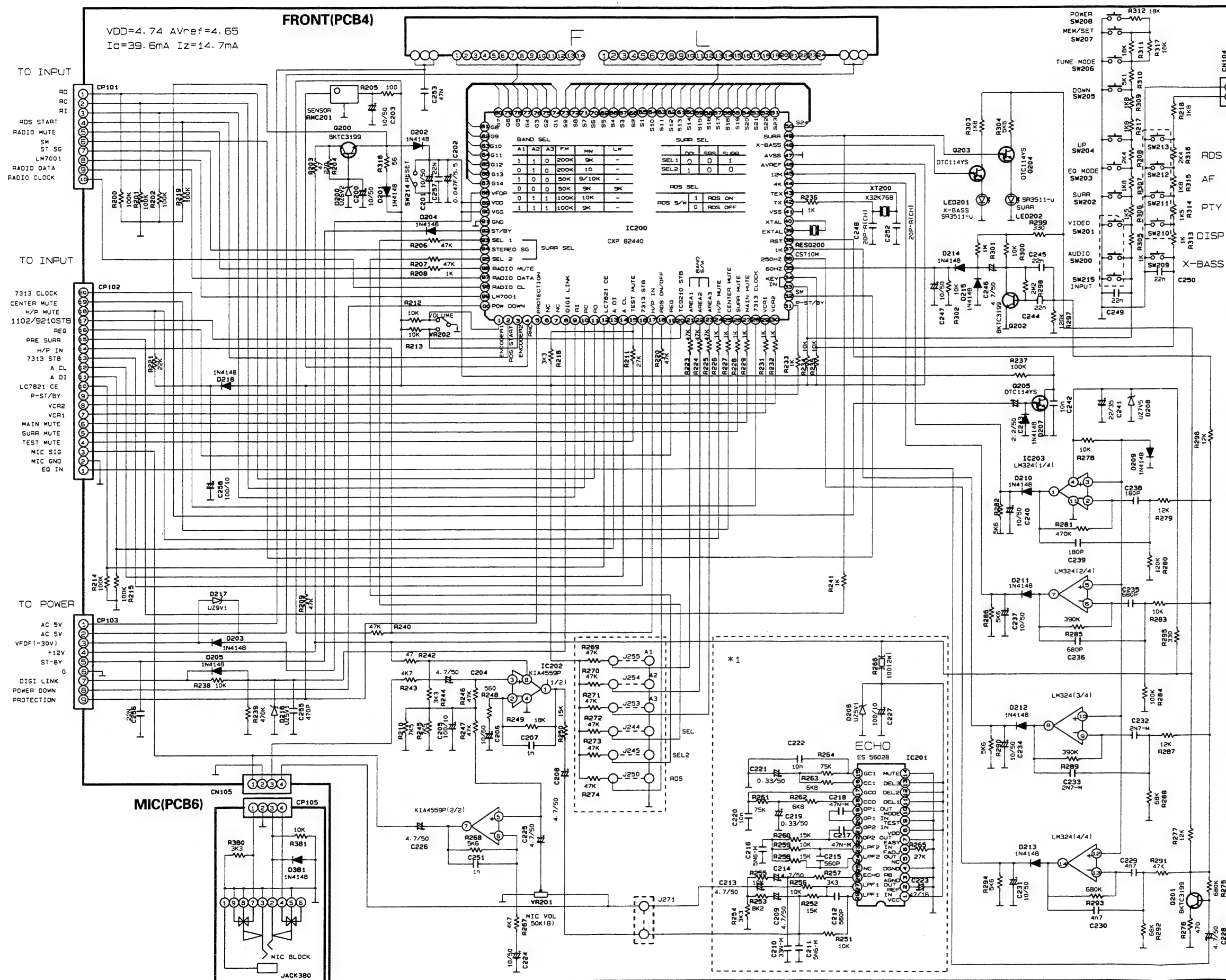
KIA 4559P : IC202, IC502, IC504



KIA 4559S : IC505

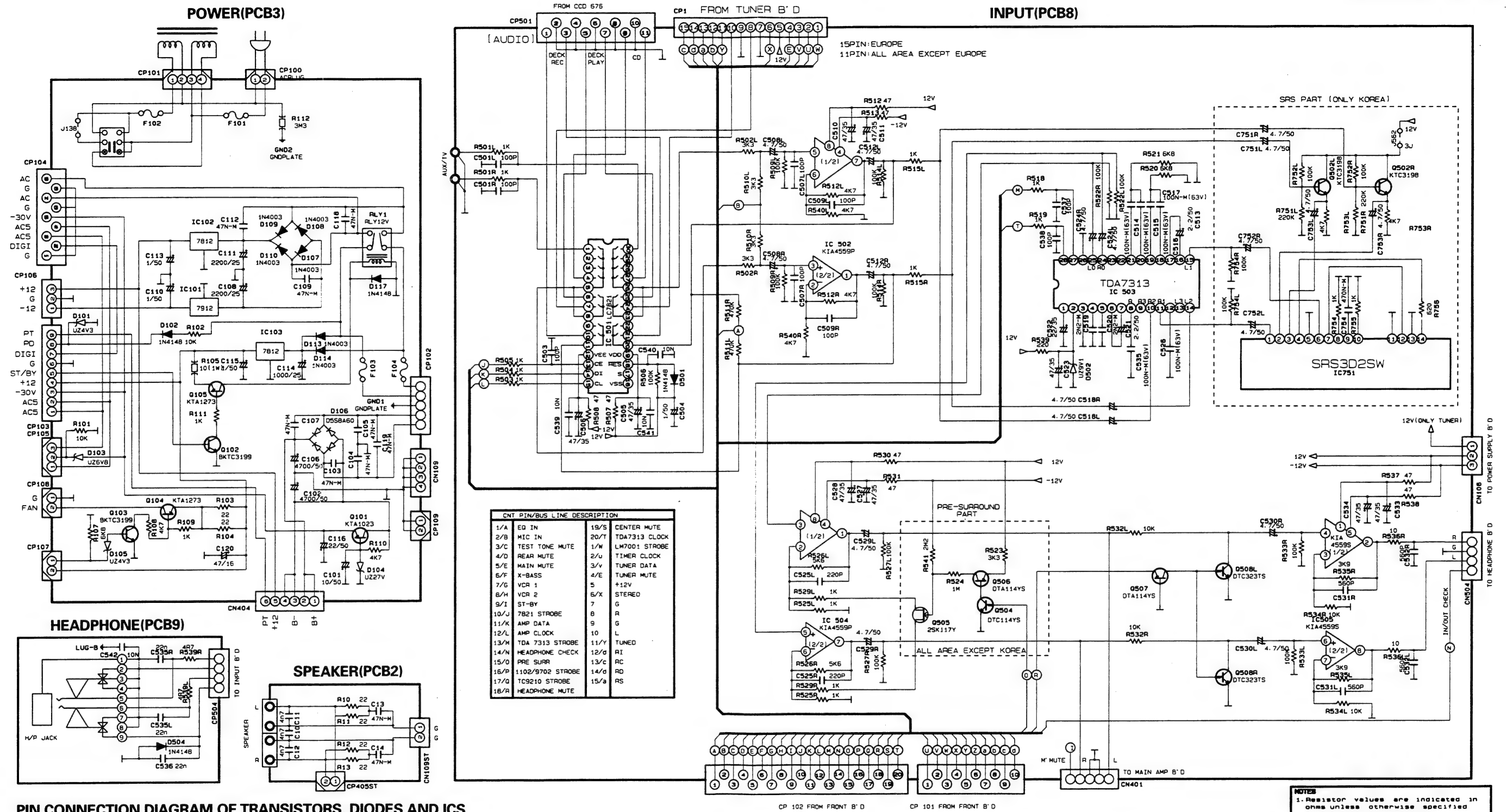


SCHEMATIC DIAGRAM (I)

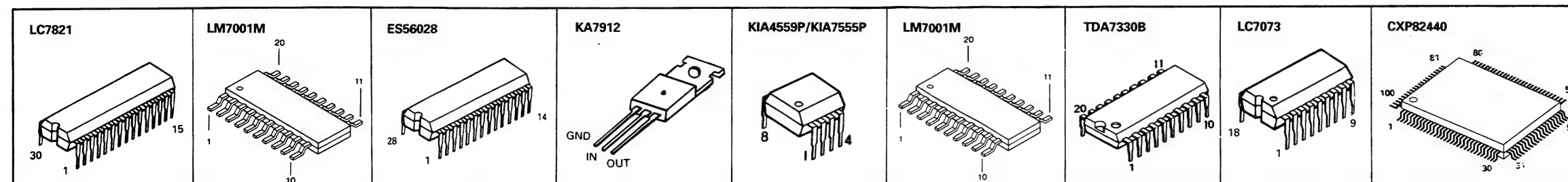


SCHEMATIC DIAGRAM (II)

Model No. : ATX-676



PIN CONNECTION DIAGRAM OF TRANSISTORS, DIODES AND ICs.



NOTES

1. Resistor values are indicated in ohms unless otherwise specified. [K=1,000 M=1,000,000]
2. Capacitor values are indicated in microfarads unless otherwise specified. [p=micro-microfarads]

CAUTION

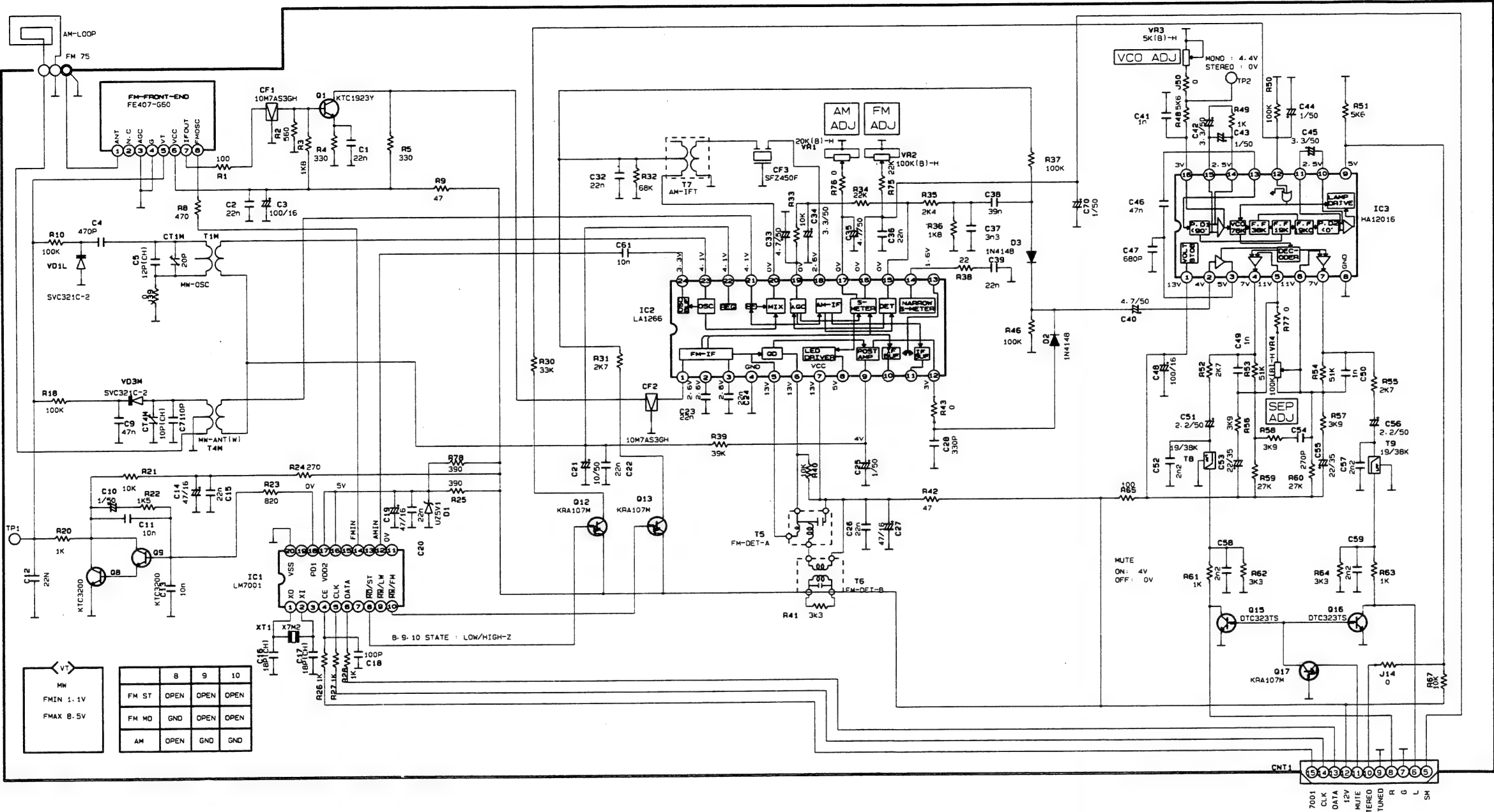
Safety precaution to be followed during servicing:

1. Since those parts marked with are critical parts for safety, use only the one described in the parts list.
2. Before returning the set to the customer, make appropriate leakage current or resistance measurements to determine the exposed parts are properly insulated from the supply circuit.

SCHEMATIC DIAGRAM (III)

Model No. : ATX-676

TUNER(PCB1) : A, K, PT INDO VERSION



	PT	A- DOM
CF1	10M7AS3GH	10M7AB
CF2	10M7AS3GH	10M7AB
R35	2K4	1K
R56	3K9	5.8K
R57	3K9	5.8K
R53	.51K	47K
R54	51K	47K
C49	1n	1n5
C50	1n	1n5
R39	39K	18K

NOTES
1. Resistor values are indicated in ohms unless otherwise specified (K=1,000 M=1,000,000)
2. Capacitor values are indicated in microfarads unless otherwise specified. (p=micro-microfarads)
CAUTION
Safety precaution to be followed during servicing
1) Since those parts marked with are critical parts for safety, use only the one described in the parts list
2) Before returning the set to the customer make appropriate leakage current or resistance measurements to determine the exposed parts are properly insulated from the supply circuit.

LA1266

KA324

KA78012

HA12016

TDA7313

KIS4559S

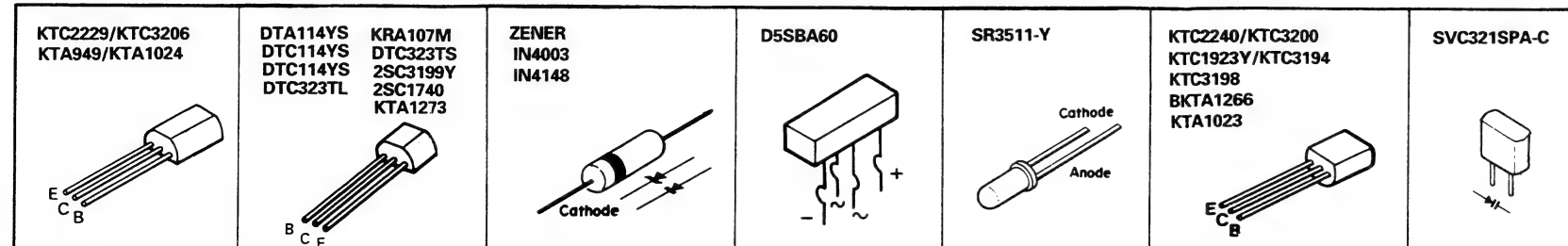
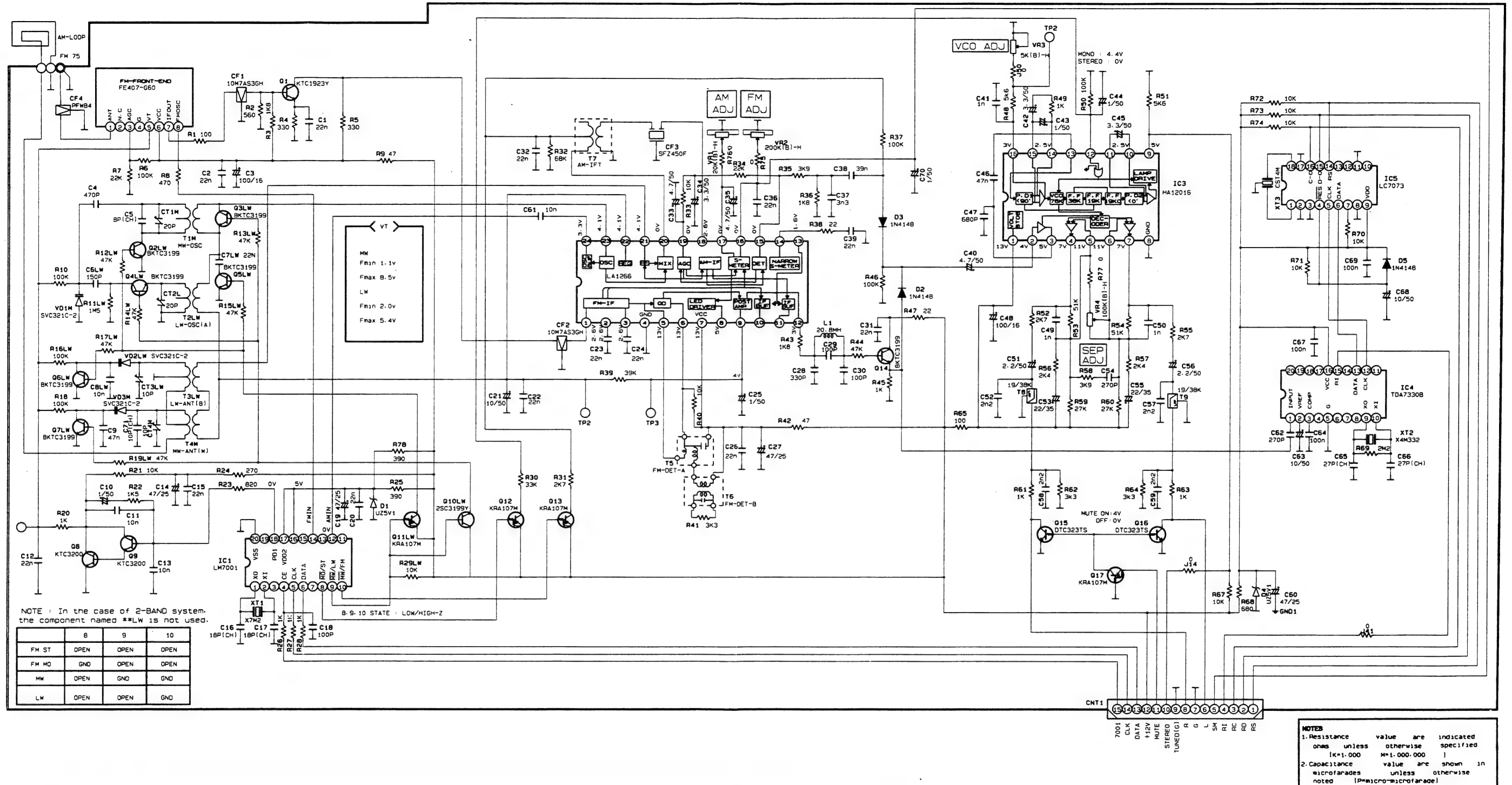
2SC3853
2SA1489

KSC2690A
KSC1220A

SCHEMATIC DIAGRAM (IV)

Model No. : ATX-676

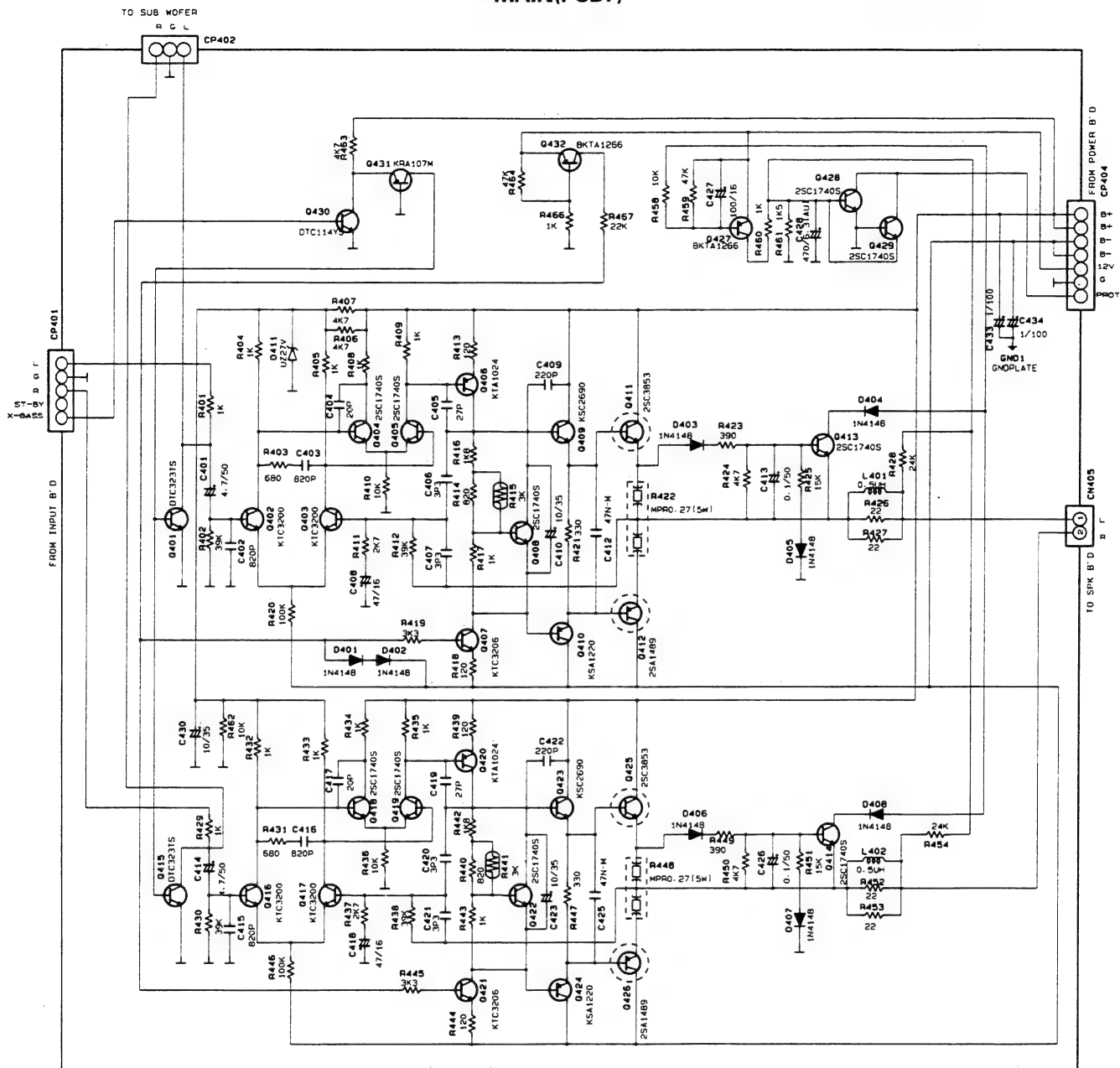
TUNER(PCB1) : D VERSION ONLY



SCHEMATIC DIAGRAM (V)

Model No. : ATX-676

MAIN(PCB7)




NOTES

1. Resistor values are indicated in ohms unless otherwise specified
[K=1,000 M=1,000,000]
2. Capacitor values are indicated in microfarads unless otherwise specified.
[p=micro-microfarads]

CAUTION

Safety precaution to be followed during servicing

- 1) Since those parts marked with  are critical parts for safety, use only the one described in the parts list
- 2) Before returning the set to the customer make appropriate leakage current or resistance measurements to determine the exposed parts are properly insulated from the supply circuit.

NOTE

CCD-676

LASER BEAM SAFETY PRECAUTIONS

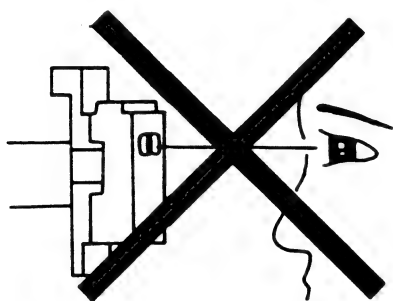
CLASS 1 LASER PRODUCT

**CLASS 1
LASER PRODUCT**

CAUTION

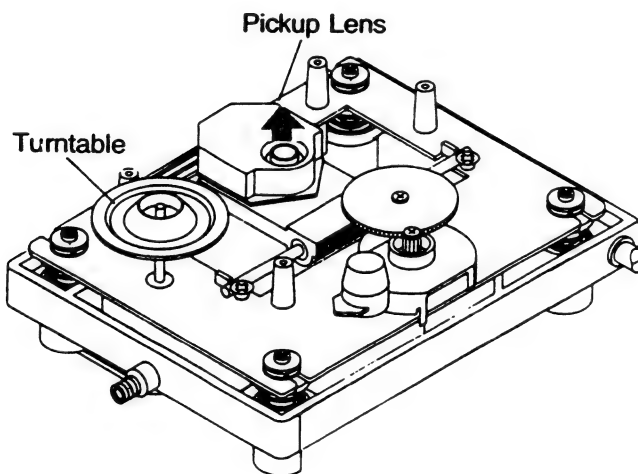
Invisible laser radiation when the unit is open. Do not stare the beam

CAUTION: USE OF ANY CONTROLS, ADJUSTMENT, OR PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.



Do not look directly at the laser beam coming from the pickup or allow it to strike against your skin.

This compact disc player uses a pickup that emits a laser beam. The laser beam is emitted from the location shown in the figure. When checking the laser diode, be sure to keep your eyes at least 1 foot away from the pickup lens when the diode is turned on. Do not look directly at the laser beam.



CAUTION:

Using controls and adjustment, or doing procedures other than those specified herein, may result in hazardous radiation exposure.

SPECIFICATIONS

DECK SECTION

- DOLBY Level: 200 nWB/m, 400 Hz (A-BEX, TCC-130). · EQ FLAT
- REC/PB Level: 0 dB=200 nWB, 400 Hz.

Description			Unit	Nominal	Limit	Test Tape
Speed at Normal			Hz	3000	±30	A-BEX, TCC-112
Wow and Flutter						
WRMS (JIS) Aerae of 3 Times			%	0.13	0.12	A-BEX, TCC-112
Check at BEG' MID/END of Tape.						
DOLBY Test Point			mV	245	±25	A-BEX, TCC-130
REC/PB Level Calibration			dB	±0.7	±1	TDK, AC-225, AC514
Playback Frequency	250 Hz		dB		Within 3	120 us: A-BEX, TCC-162C
	10 kHz		dB		Within 3	70 us: A-BEX, TCC-262C
	12.5 kHz		dB		Within 4	
REC/PB Frequency Response						
	DOLBY NR OFF	250 Hz	dB		Within 3	NOR: TDK, AC-514, AC-225
		10 kHz	dB		Within 3	
		12.5 kHz	dB		Within 5	
	DOLBY NR ON	250 Hz	dB		Within 3	
		10 kHz	dB		Within 3	
		12.5 kHz	dB		Within 5	
3rd Harmonic Distortion (0 dB)			%	2	2.5	NOR: TDK, AC-514
Total Harmonic Distortion (0 dB)			%	3	3.5	NOR: TDK, AC-514
Channel Crosstalk (B.P.F at 1 kHz)			dB	40	35	NOR: TDK, AC-514
Signal to Noise Ratio (K3=3%)	UNWTD	DOLBY OFF	dB	43	41	NOR: TDK, AC-225, AC-514 DOLBY B NR Effect: 8.5 dB
		DOLBY B	dB	44	42	
	WTD	DOLBY OFF	dB	45	43	
		DOLBY B	dB	54	52	
Erase Attenuation (B.P.F at 1 kHz, +10 dB Input)				65	60	NOR: TDK, AC-514
Output Voltage (at Volume Level 19)			V	2	±0.4	A-BEK, TCC130

CD SECTION

- Test Disc: SONY YEDS7 or ABEX TCD784, TCD725
- at DOLBY Tape (TCC-130), Speaker Output 2 V (Volume Level 19) · EQ FLAT

Description	Unit	Nominal
Signal to Noise ratio (WTD)	dB	65
Total harmonic Distortion	%	15
Frequency response (1 kHz=0 dB)	dB	± 0,4
	dB	± 1,5

ENVIRONMENTAL

Test to specification

Temperature between 59°F (15°C) and 95°F (35°C) and relative humidity between 45% and 75%, with power supply voltage of 10% the normal supply voltage.

Test disc: SONY YEDS-7 or ABEX TCD784, TCD725.

Operation

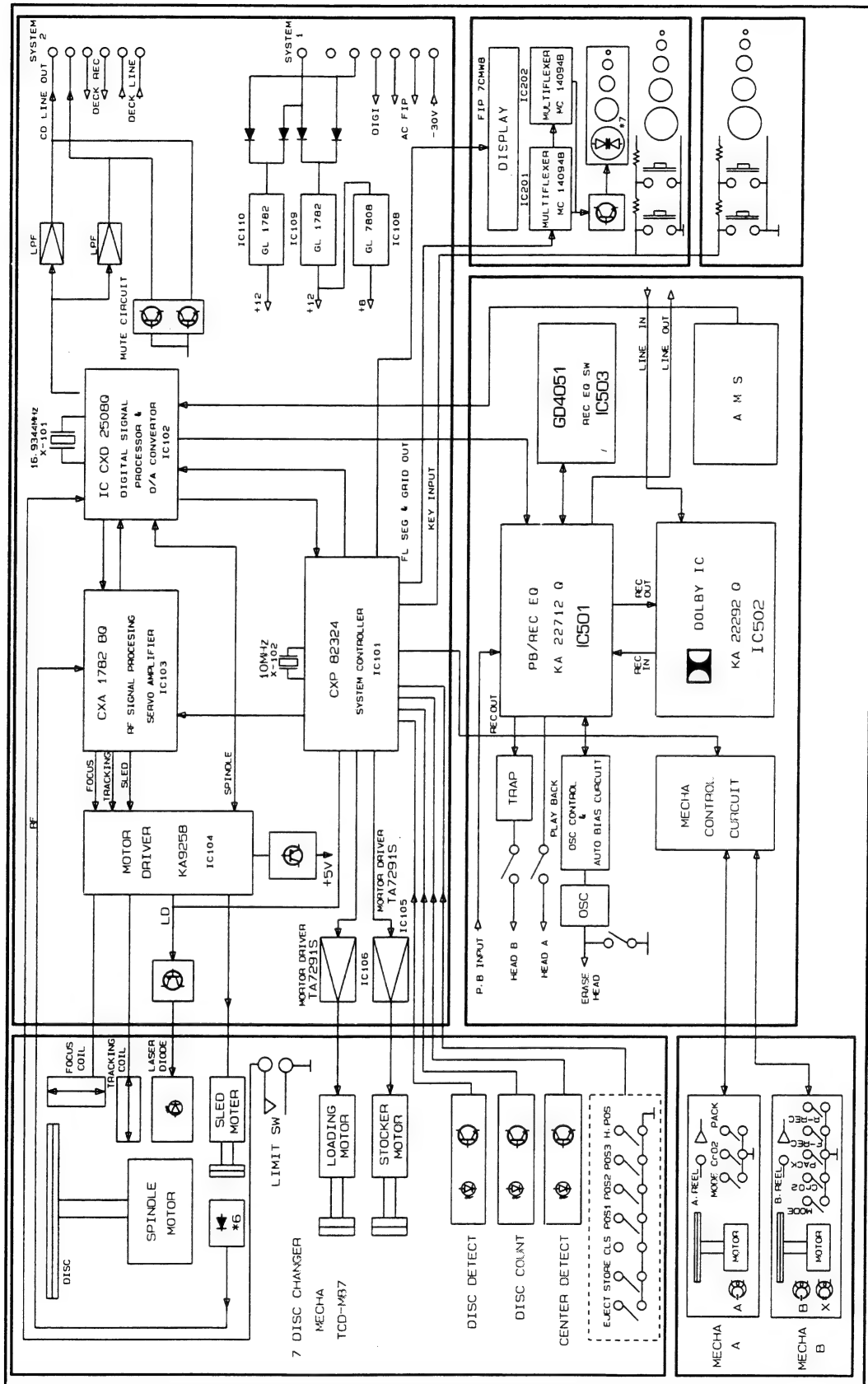
Unit must work properly and correctly at the temperature range from 32°F (0°C) to 113°F (45°C) and the relative humidity from 40% to 80%, and with the supply voltage.

Storage

Temperature test: 48 hours each at -40°F (-40°C) and 149°F (65°C), Humidity test: 40°C 95% relative humidity.

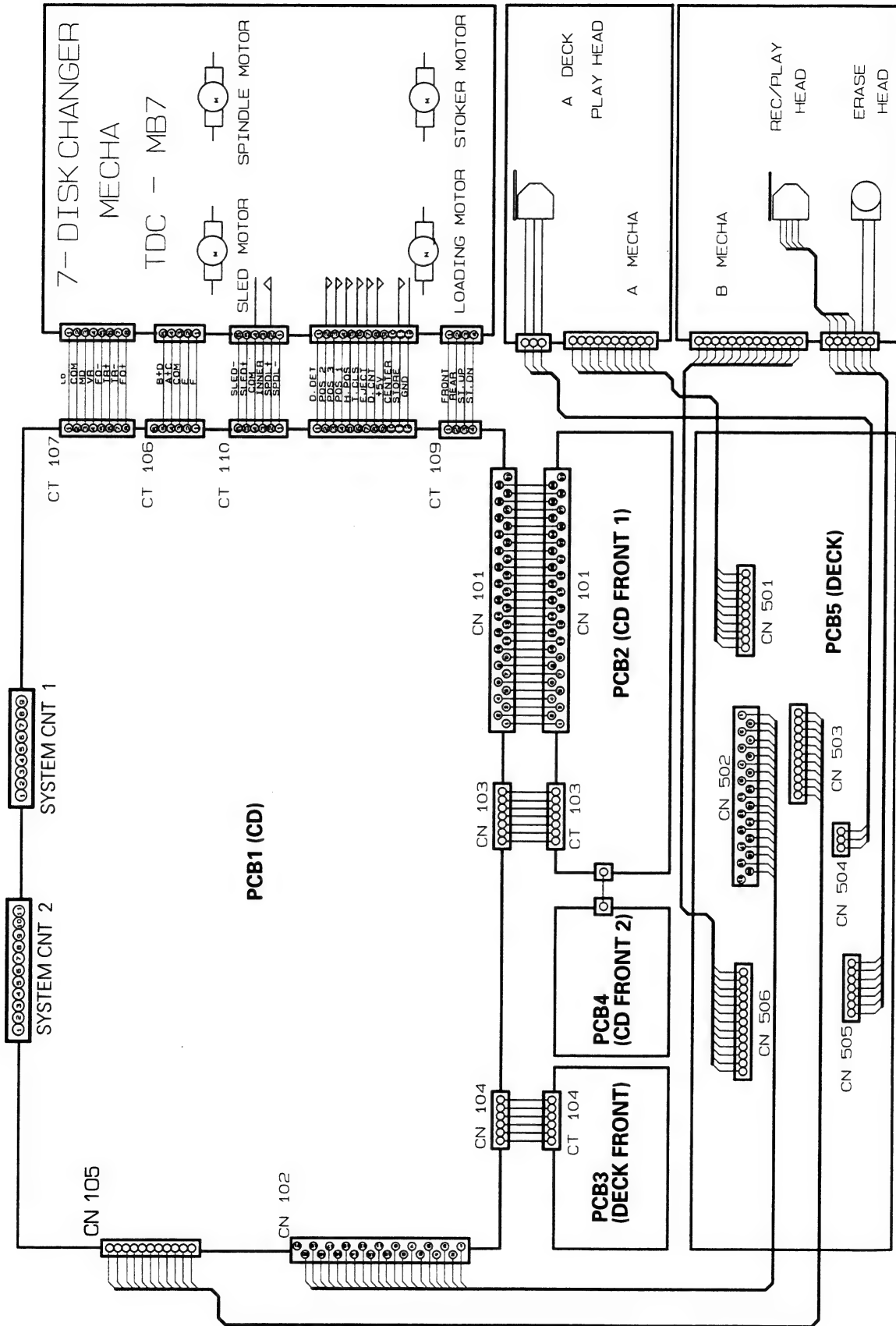
BLOCK DIAGRAM

Model No. : CCD-676



WIRING DIAGRAM

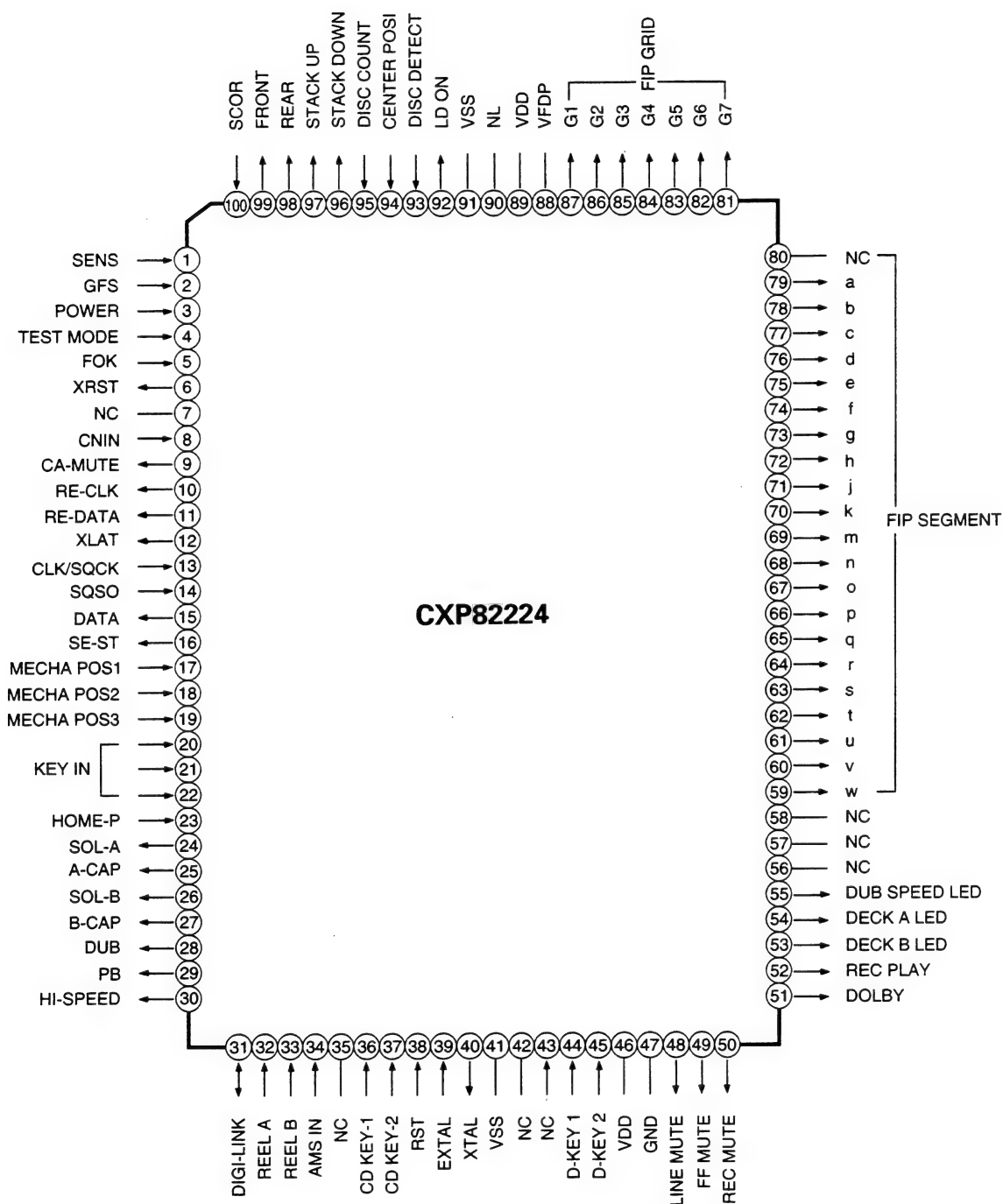
Model No. : CCD-676



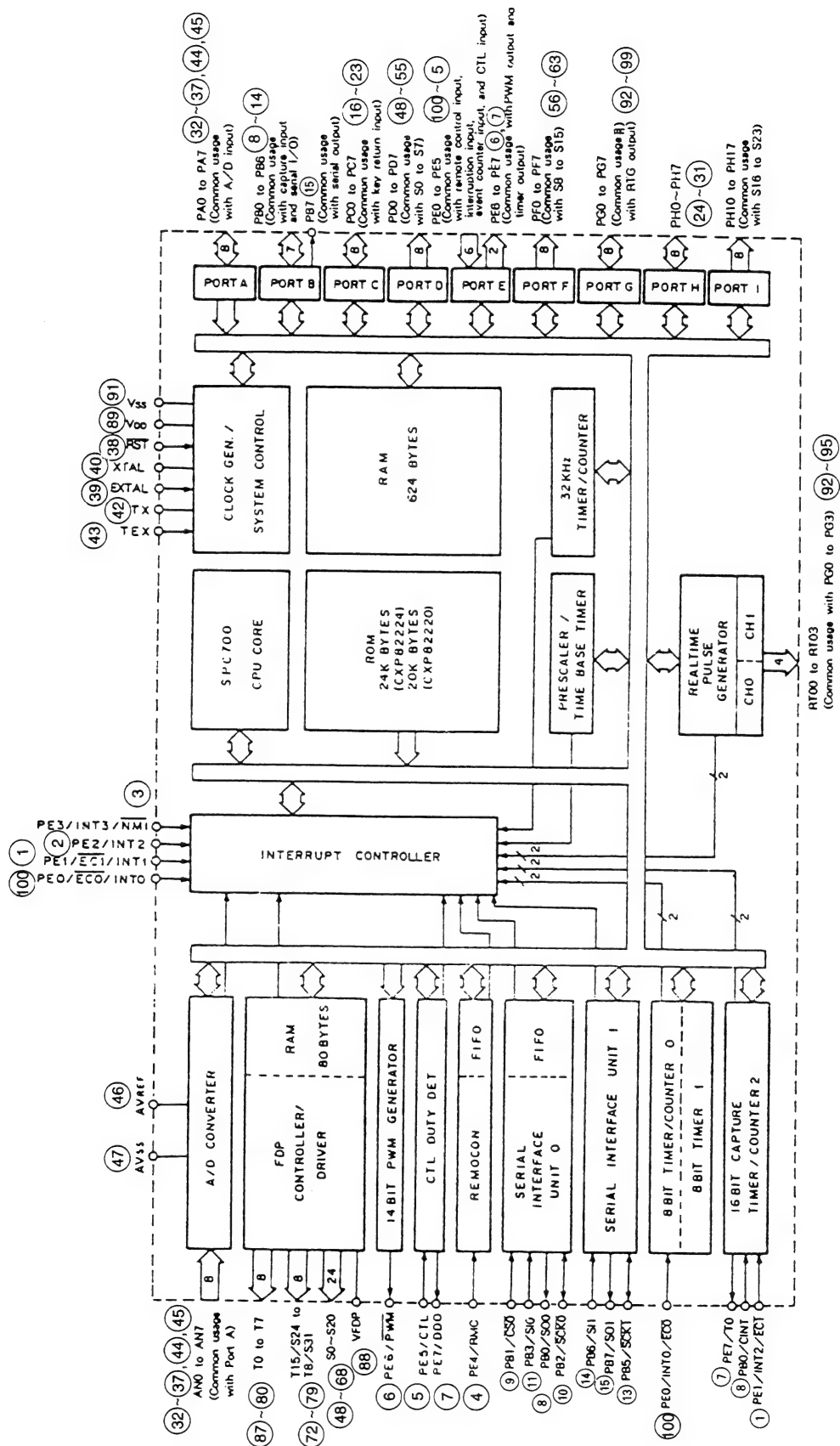
CIRCUIT DESCRIPTION

IC101 : CXP82224 CMOS 8-bit Single Chip Microcomputer.

1. Pin Configuration



2. Block Diagram



3. Input and Output terminal Functions

Pin No.	Symbol	Description
1	SENS	Sens input from CXD2508Q (pin7).
2	GFS	GFS input from CXD2508Q (pin51) during CD operation.
3	POWER	Self power key.
4	TEST MODE	Self power on test
5	FOK	Focus ok input from CXD2508Q (pin23).
6	XRST	Output for resetting CXD2508Q.(At "L", it is active)
7	NC	Not used !
8	CNIN	Input from C.out of CXA1782BQ (pin23).
9	CA-MUTE	Output for CD line mute.
10	RE-CLK	Shift resistor output (CLK) to MC14094B.
11	RE-DATA	Shift resistor output (DATA) to MC14094B.
12	XLAT	Serial latch data output to CXD2508Q (pin10).
13	CLK/SQCK	Clock data input for subcode-Q readout to CXD2508Q.
14	SQSO	Subcode-Q signal input form CXD2508Q.
15	DATA	Serial data output to CXD2508Q.
16	SE-ST	Shift resistor output (ST) to MC14094B.
17~19	1/2/3	Mechanism drive motor control input.
20~22	KEY-IN	Data input for key scan.
23	HOME-P	Input to detect the CD loaded on the pick-up.(At "H", it is active)
24	SOL-A	Output for driving the solenoid of Deck I .
25	A-CAP	Output for driving the capstan of Deck I .
26	SOL-B	Output for driving the solenoid of Deck II .
27	B-CAP	Output for driving the capstan of Deck II .
28	DUB	Output for dubbing.(Dubbing mode: "H", Play mode: "L")
29	PB	Output for playback.
30	HI-SPEED	Output to control the tape speed.(At "L", it is in the high speed dubbing mode)
31	DIGI-LINK	Input/Output for controlling digi-link.
32	REEL A	Input for detecting the reel pulse from Deck I .
33	REEL B	Input for detecting the reel pulse from Deck II .
34	AMS IN	Input for checking the balnk space during AMS (Atomatic Music Searching) (If on the blank space, then "H")
35	NC	Not used !
36	CD KEY-1	CD disc selection key A/D input.
37	CD KEY-2	CD operation key A/D input.
38	RST	Input to reset u-com.
39/40	EXTAL/XTAL	Input/Output for crystal oscillator.
41	VSS	This pin provides the ground potential.
42/43	NC	Not used !
44/45	D-KEY 1/2	Data input for key scan.
46	VDD	+5V power supply for CPU.
47	GND	Ground

Pin No.	Symbol	Description
48	LINE MUTE	Output for muting the line output. Except play or recoding (dubbing), Output is "H".
49	FF MUTE	Output for muting line output FF or REW.(If FF or REW, then "H")
50	REC MUTE	Output for muting recoding. (If recoding, then "L")
51	DOLBY	Output to select DOLBY NR or not.(DOLBY NR on: "L", off: "H")
52	REC PLAY	Output for controlling the record.
53	DECK B LED	Output for lighting on the LED at deck mode.(If deck play, then "H")
54	DECK A LED	Output for lighting on the LED at deck mode.(If deck play, then "H")
55	DUB SPEED LED	Output for lighting on the LED at high dubbing mode. (If high dubbing, then "H")
56 ~ 58	NC	Not used !
59 ~ 79	a ~ h,j,k,m,n,o,w	Output for FIP segment.
80	NC	Not used !
81 ~ 87	G7 ~ G1	Output for FIP grid.
88	V _{FDP}	-30V power supply for FIP.
89	VDD	+5V power supply for CPU.
90	NC	Not used !
91	Vss	Ground
92	LD-ON	LD-ON signal output to pick-up unit.
93	DISC DETECT	Input to detect the CD being pulled out from the mechanism.
94	CENTER POSI	Input to detect the center position.
95	DISC COUNT	Input to detect the disc count.
96	STACK DOWN	Stack motor down drive output.
97	STACK UP	Stack motor up drive output.
98	REAR	Loading motor rear drive output.
99	FRONT	Loading motor front drive output.
100	SCOR	Subcode sync input from CXD2508Q (pin1) during CD operation.

ALIGNMENT PROCEDURES

DECK PART

Before Measurements and Adjustments

The following general conditions apply to the electrical measurements and adjustments unless especial stated otherwise.

– Dolby NR switch off.

1. Test Tape

- TCC -154 Azimuth (12.5 kHz, –24 dB)
- TCC -112 Tape Speed (3 kHz, –10 dB)
- TCC -130 Playback Level (Dolby Ref. Tape, 400 Hz, 0 dB)
- TCC -185C Playback frequency response
- Reference Tape TDK, AC-225, AC-514

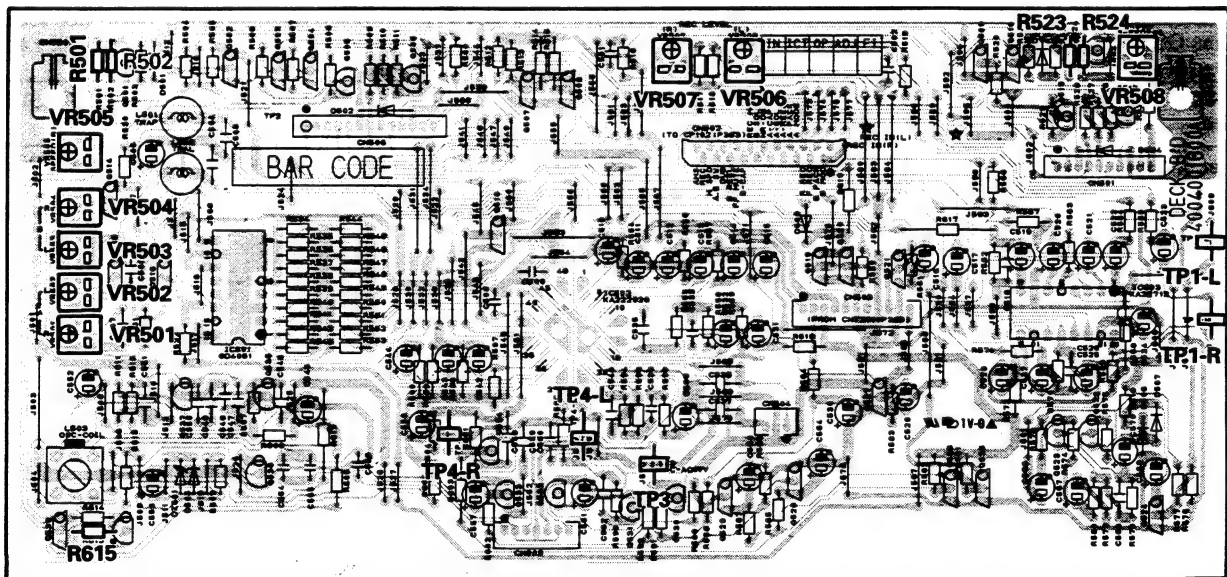
2. Instrument required

- Audio frequency oscillator
- ACVM or dual channel, mV-meter
- Wow/Flutter meter
- Oscilloscope

3. Test Reference

Point : TP1-L/R (Dolby T/P)

Level : 245 mV (TCC-130 Play)



4. Playback section

Adjustments	Test tape	Mode	Apply Signal to	Measure on	Read on	Adjust with	Adjust to
Head Azimuth	TCC-154 12.5 kHz (A.BEX)	FWD Play (1 & 2 Deck)		Dolby TP(TP1-L/R)	AC mV-meter Oscilloscope	Adjusting a left screw of head	Max Lissajous wave from become a straight line with an angle 45 degrees
		REW (2 Deck)				Adjusting a right screw of head	
Playback Speed at normal	TCC-112 3 kHz -10 dB (A.Bex)	Play (1 & 2 Deck)			Wow and Flutter Meter	1 Deck : VR508 2 Deck : VR505	3000 Hz ± 30 Hz
Playback at high-speed	TCC-112 3kHz -10dB (A. Bex)	TP2 : GND				1(R523, R524) 2(R501, R502)	4400 Hz ± 45 Hz
Playback Level	TCC-130 400 Hz, 0 dB (A. Bex)					AC mV-meter	1 Deck : VR501, VR502
		2 Deck : VR503, VR504					
Playback frequency response	TCC-185C 12.5 kHz, 1 kHz, 60 Hz (A.Bex)					AC mV-meter	

5. Recording section

Adjustments	Test tape	Mode	Apply Signal to	Measure on	Read on	Adjust with	Adjust to
Bias OSC Frequency	AC-225 (TDK)	Rec/Pause	400 Hz 400 mV Video	TP3	Frequency Counter	R615	105KHZ \pm 400HZ
Target value Bias	AC-225 (TDK)	Rec/Pause		TP3	AC mV-meter	R615	AC 17V \pm 1V
Recording Level	AC-225 (TDK)	Rec/Pause		TP4-L/R		VR506, VR507	AC 320mV

Note :

- *a. Prior to any measurement or adjustment with the tape running, heads and tape guides should be degaussed and cleaned. Reference below the figuer.
- *b. The maximum permissible speed variation $\pm 1.0\%$. Moerover the Wow and Flutter can be read. This value on line out be exceed 0.2%
- *c. The voltage on line out shoule be $400\text{mV} \pm 20\text{mV}$. If not, it reduce the LF signal (bias disabled) as many as the reading was too low or too high by VR503/504, VR501/502.
- *d. When the channel is adjsted, this may slightly affect the adjustment of the other channel. If the adjustment is correct, the frequency response curve will be similar to curve b in figure 1, distortion below 3%.

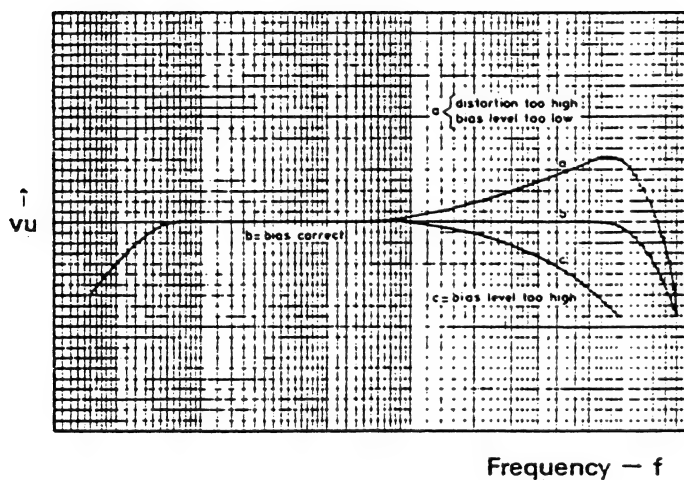
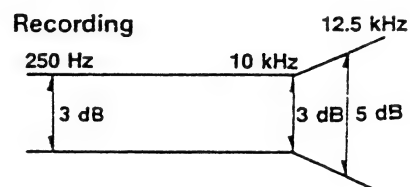
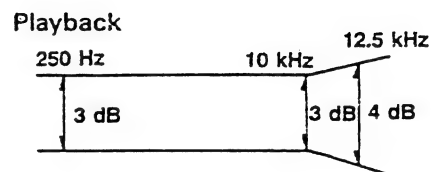


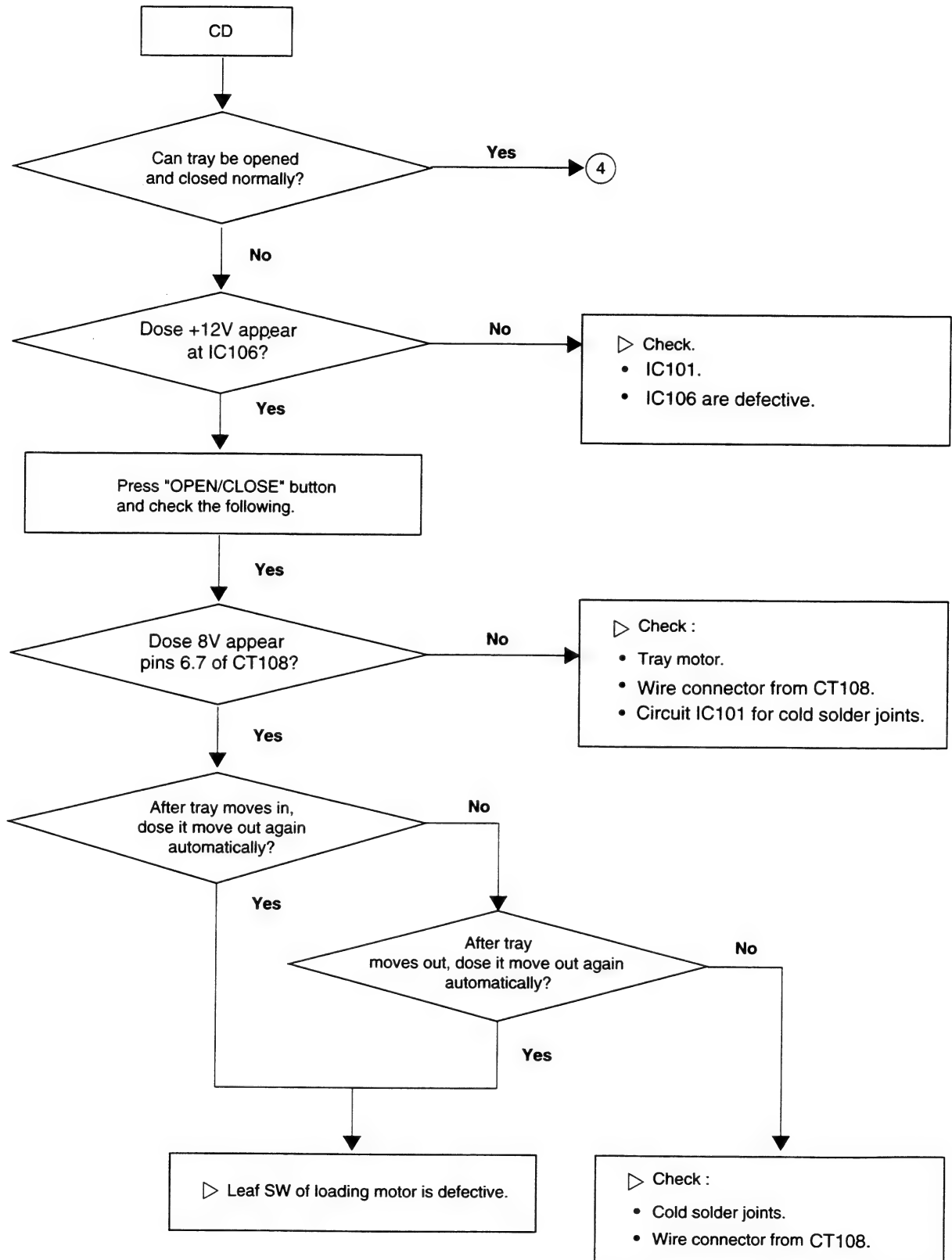
Figure 1

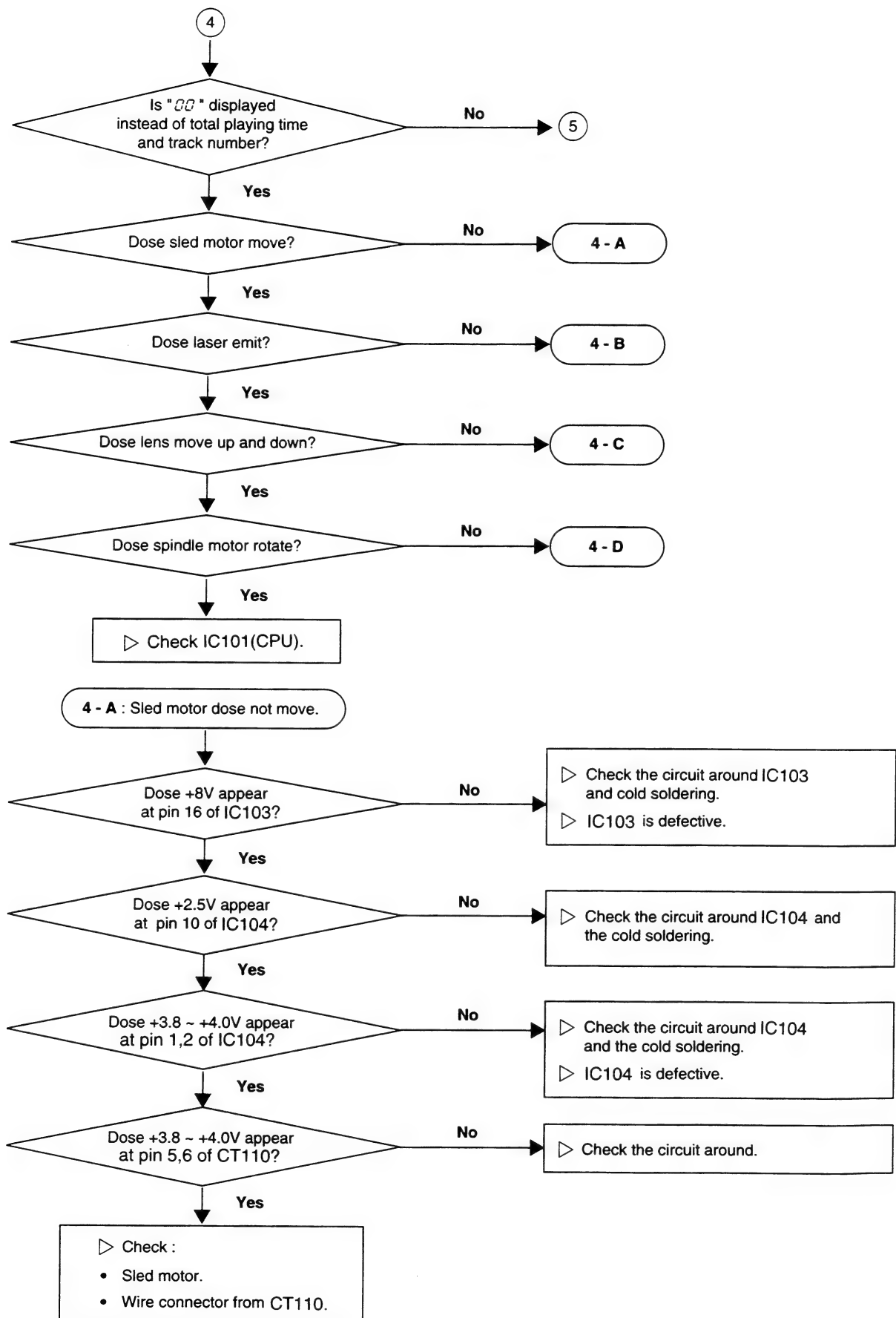


**Allowable Playback/Recording
Frequency Response Zone**

Figure 2

TROUBLESHOOTING





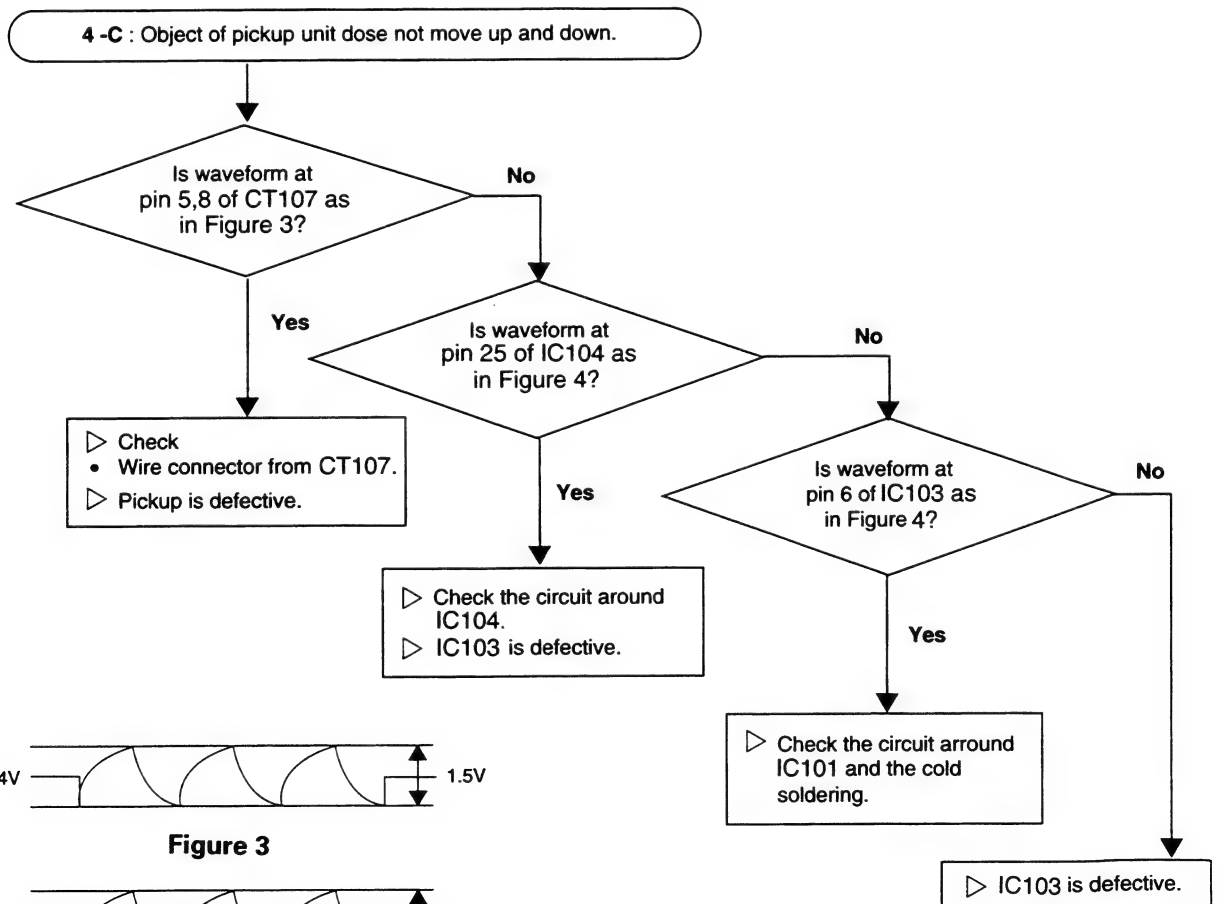
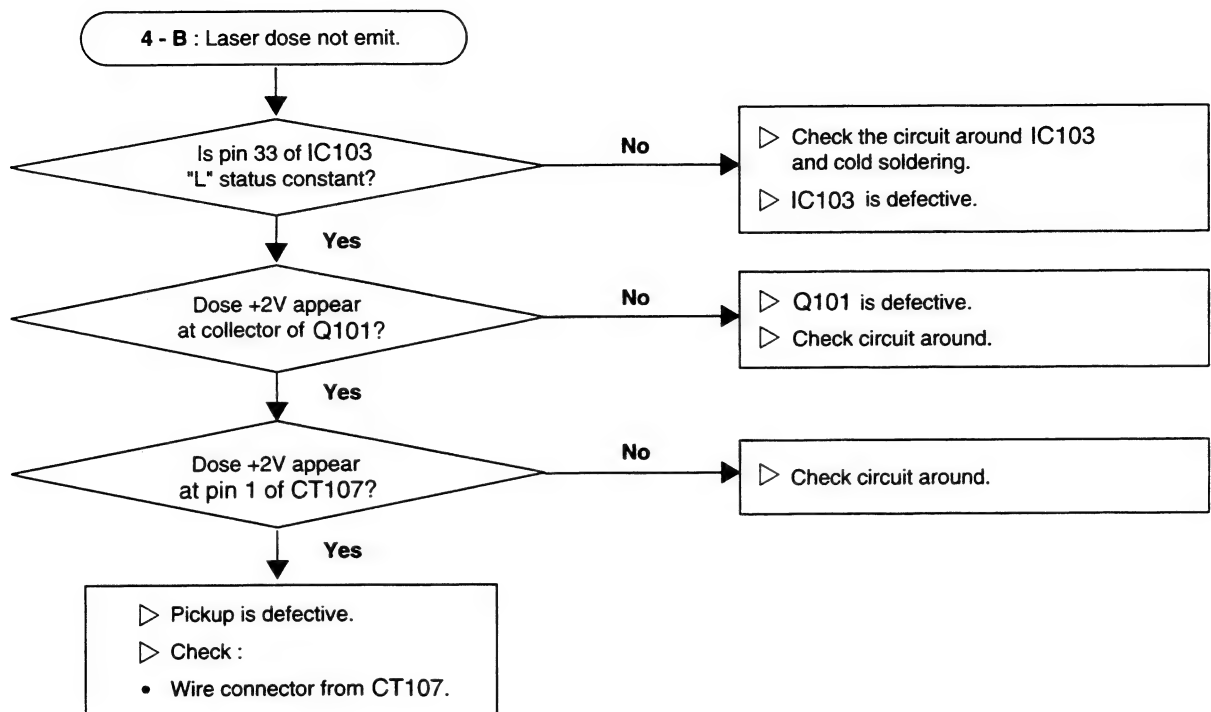
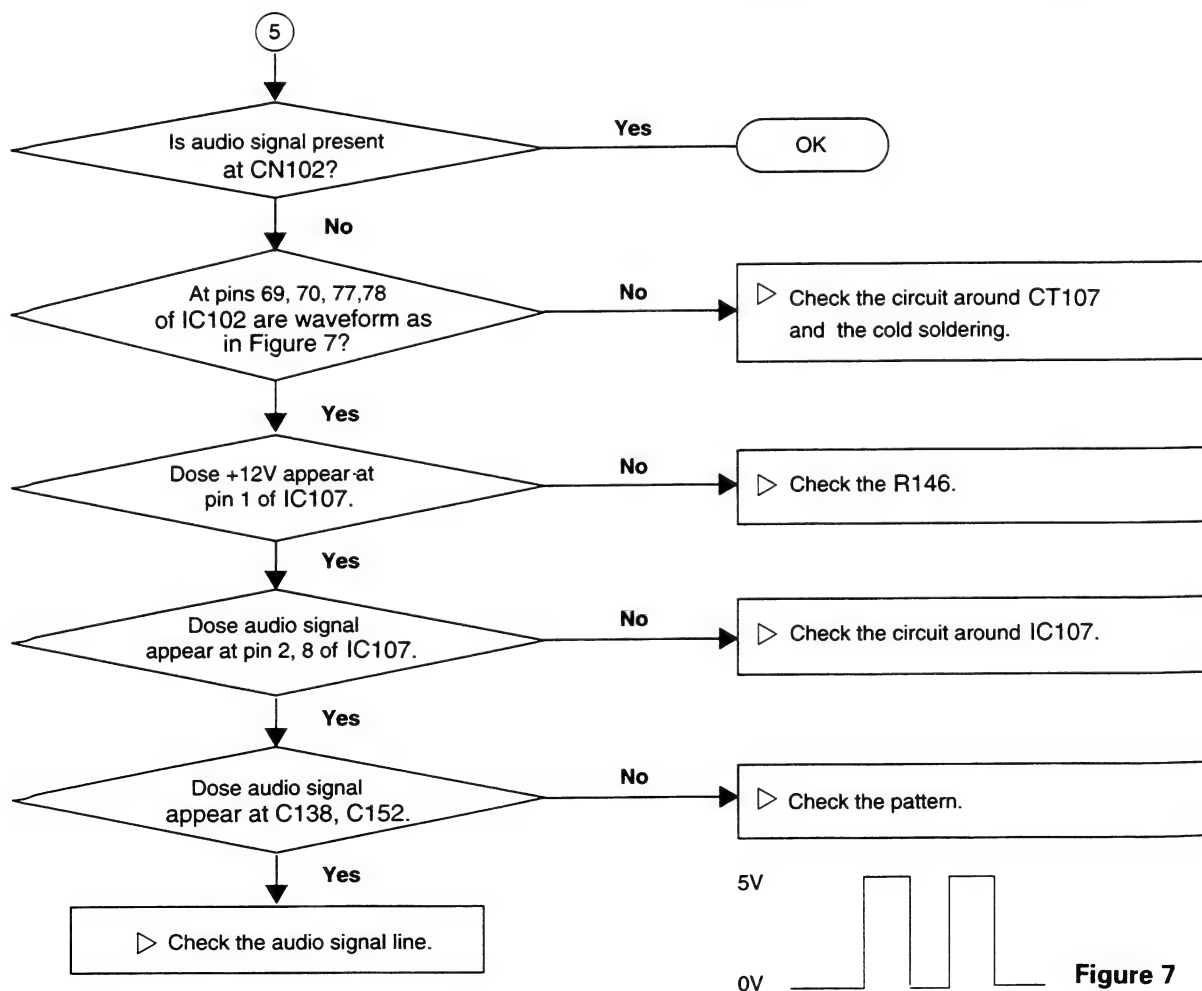
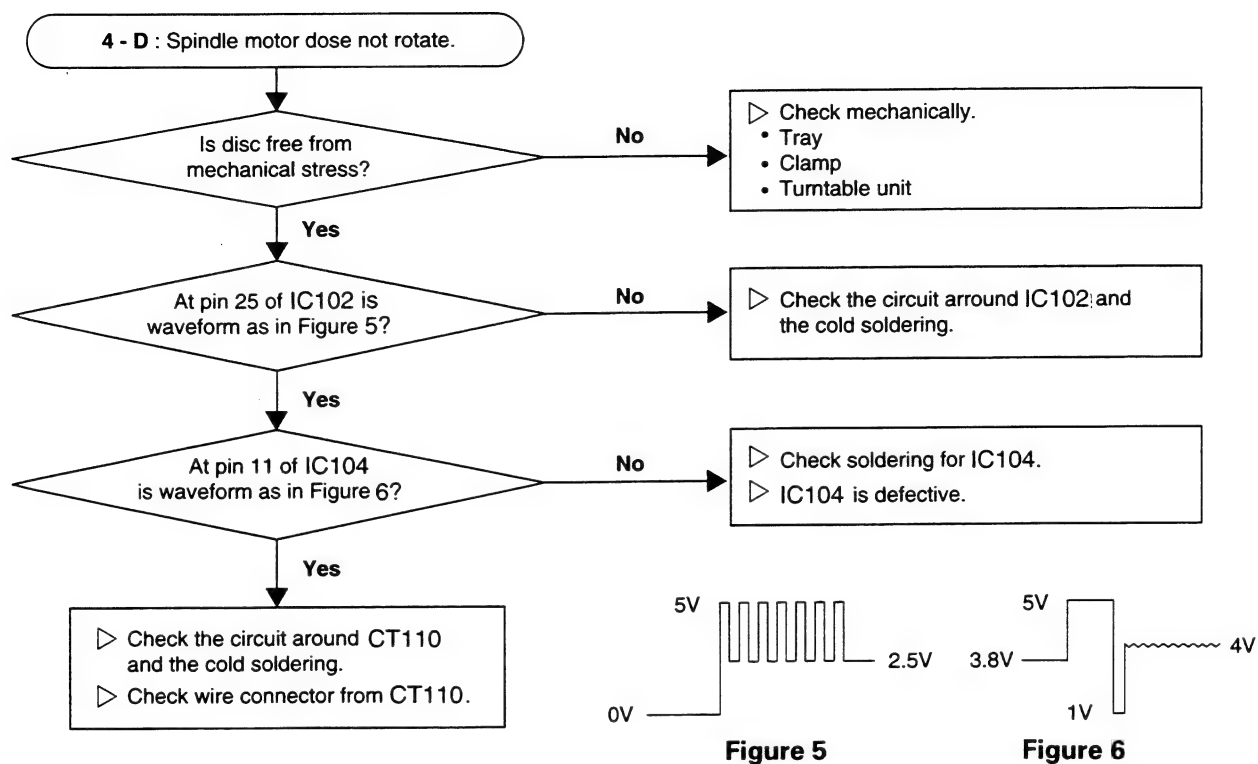
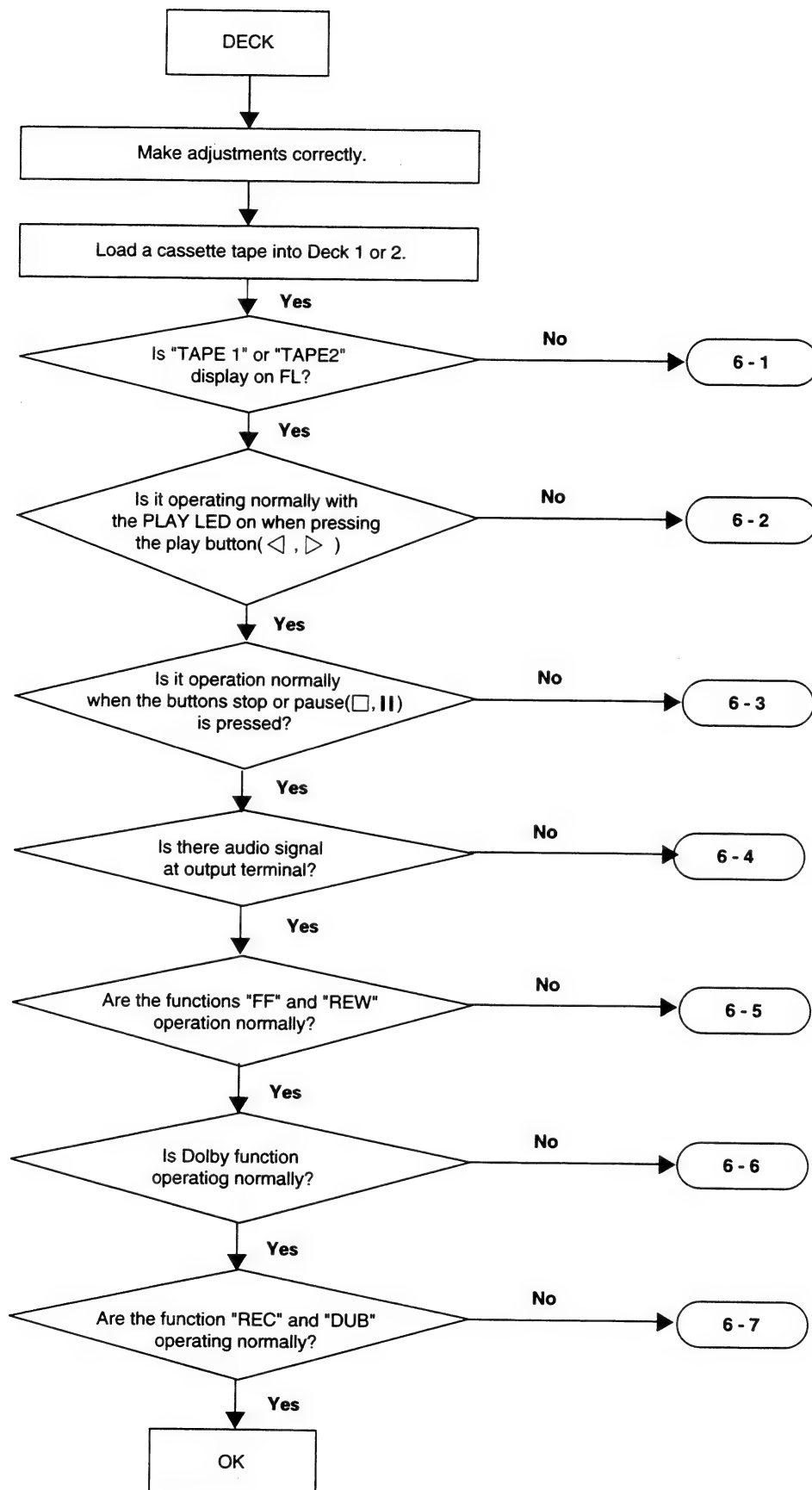


Figure 3



Figure 4





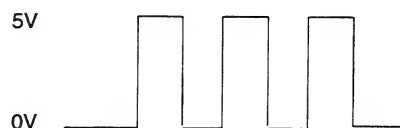
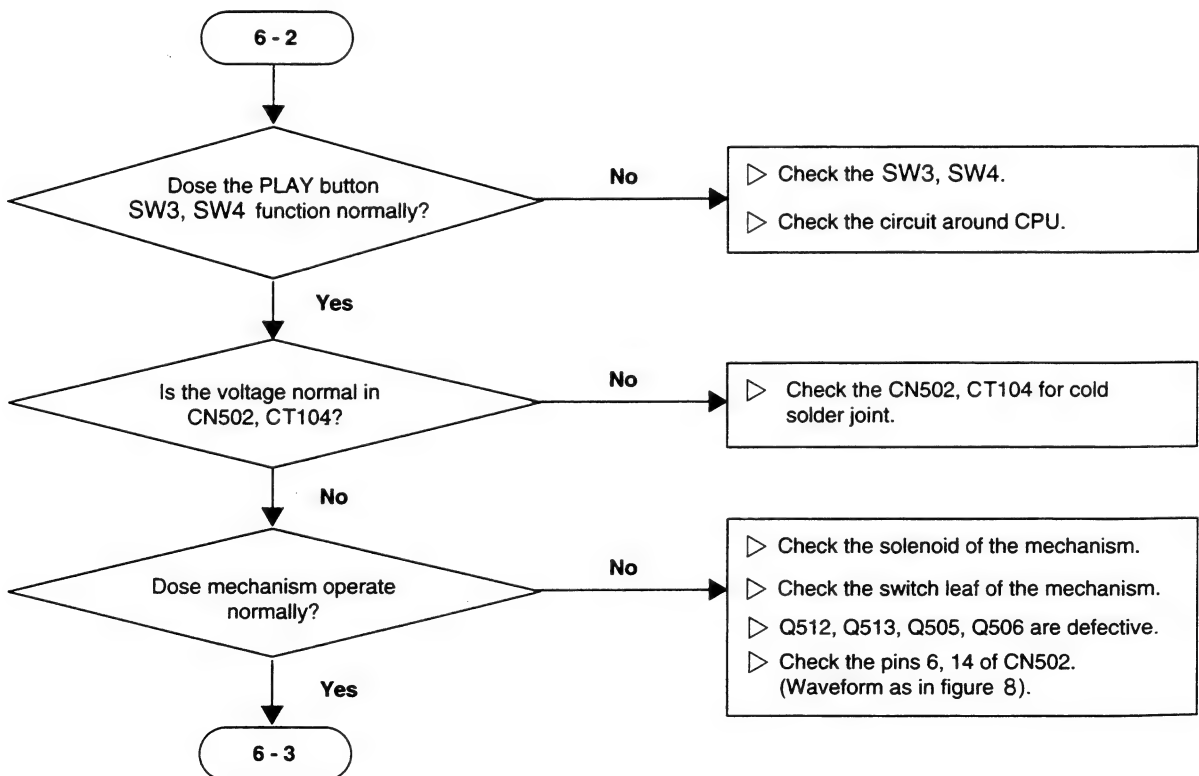
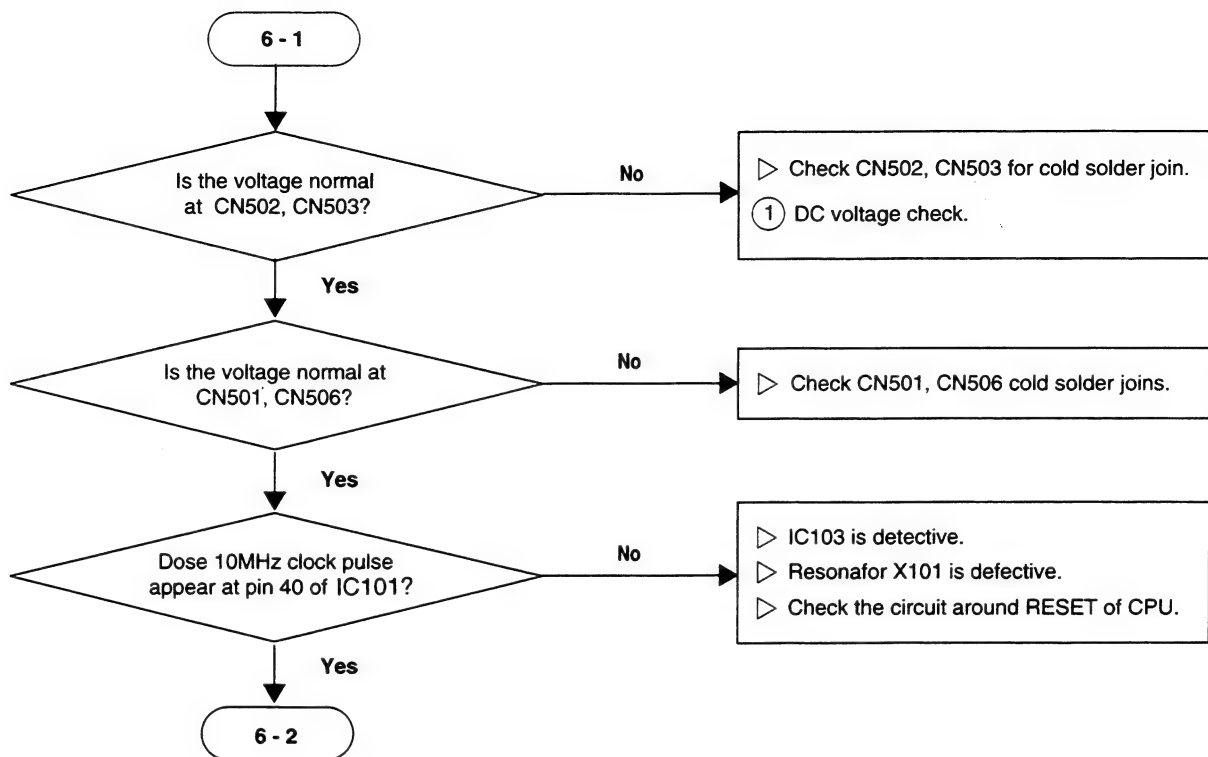
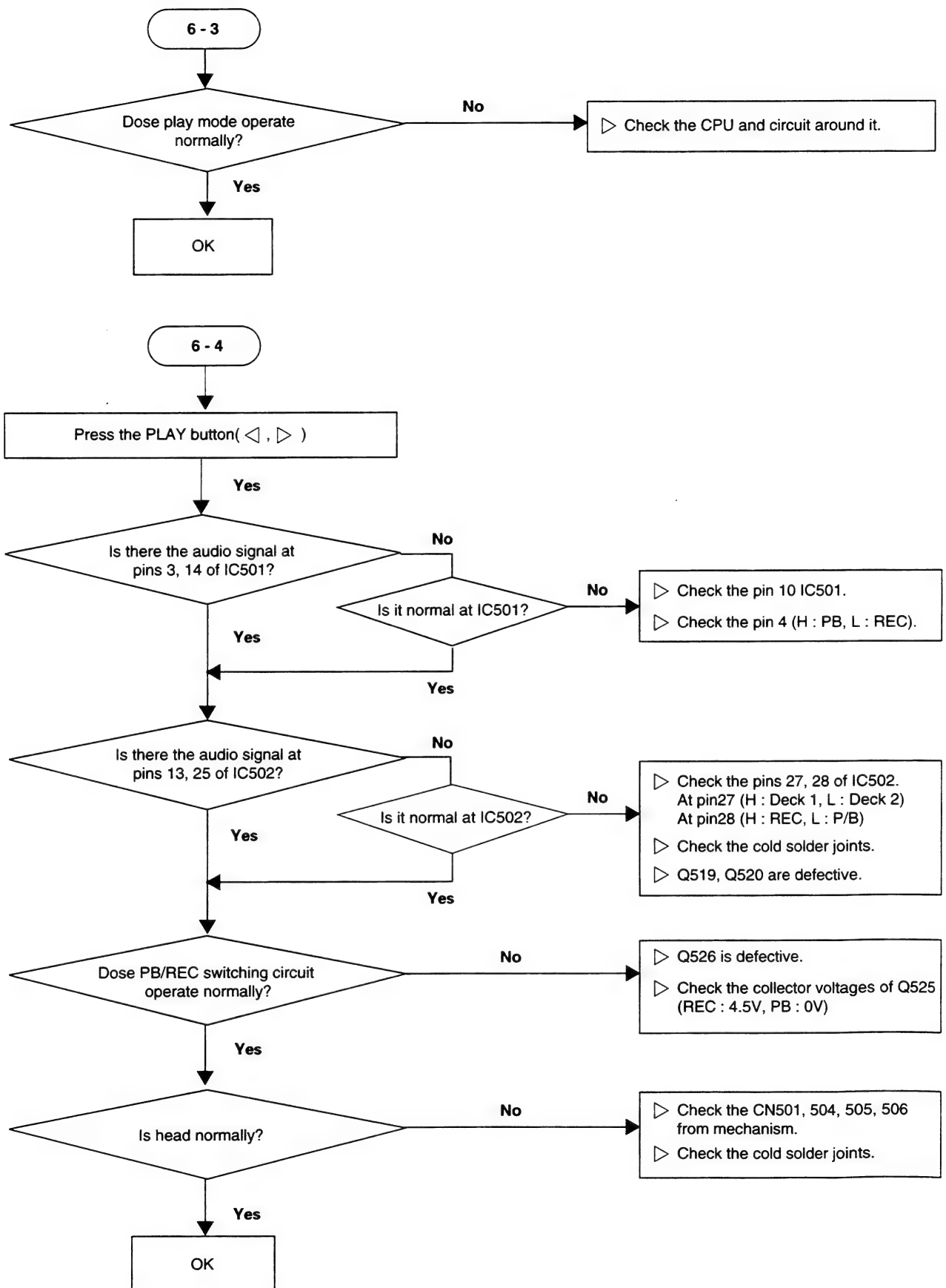
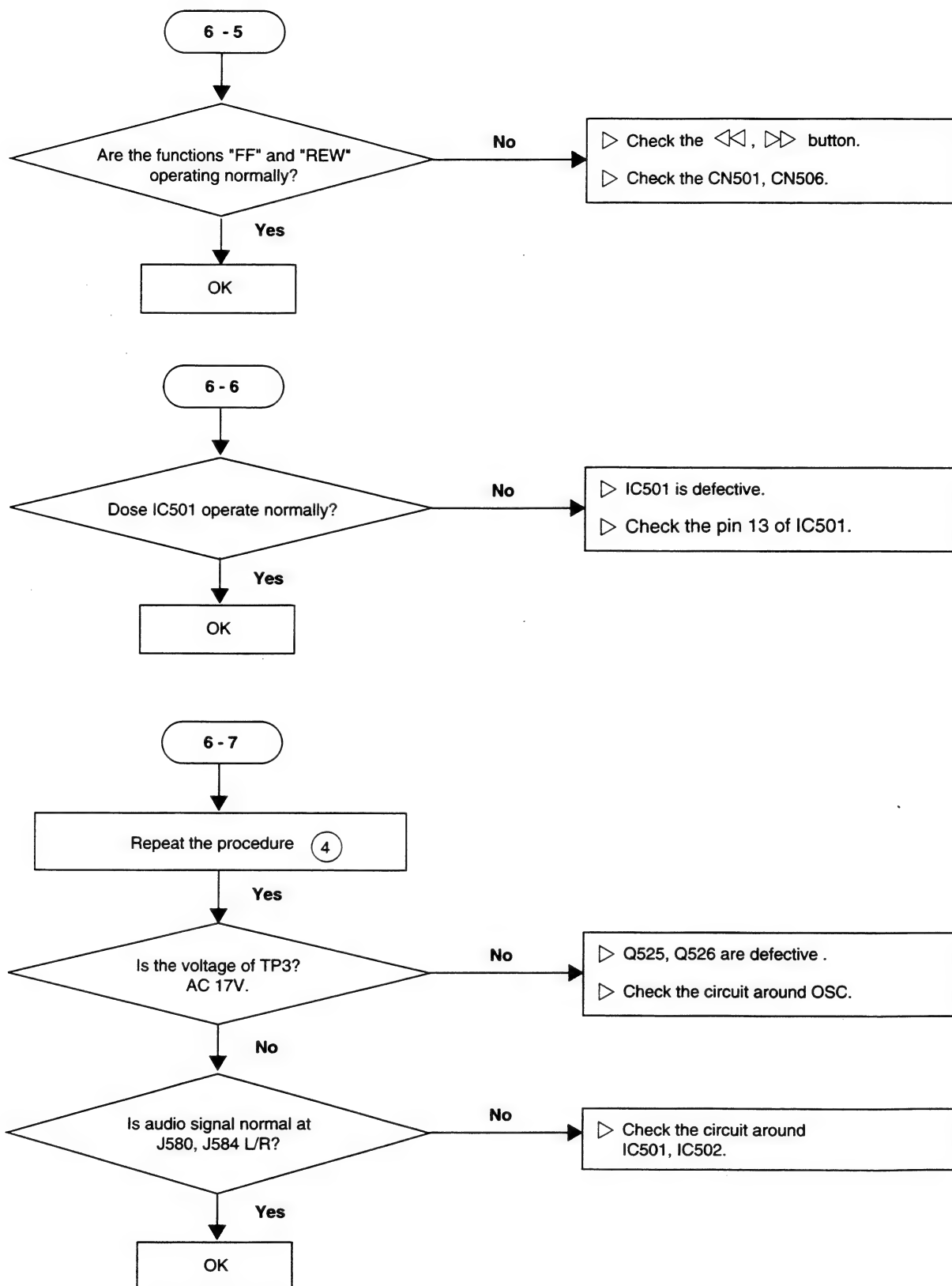


Figure 8





MECHANICAL PARTS LIST

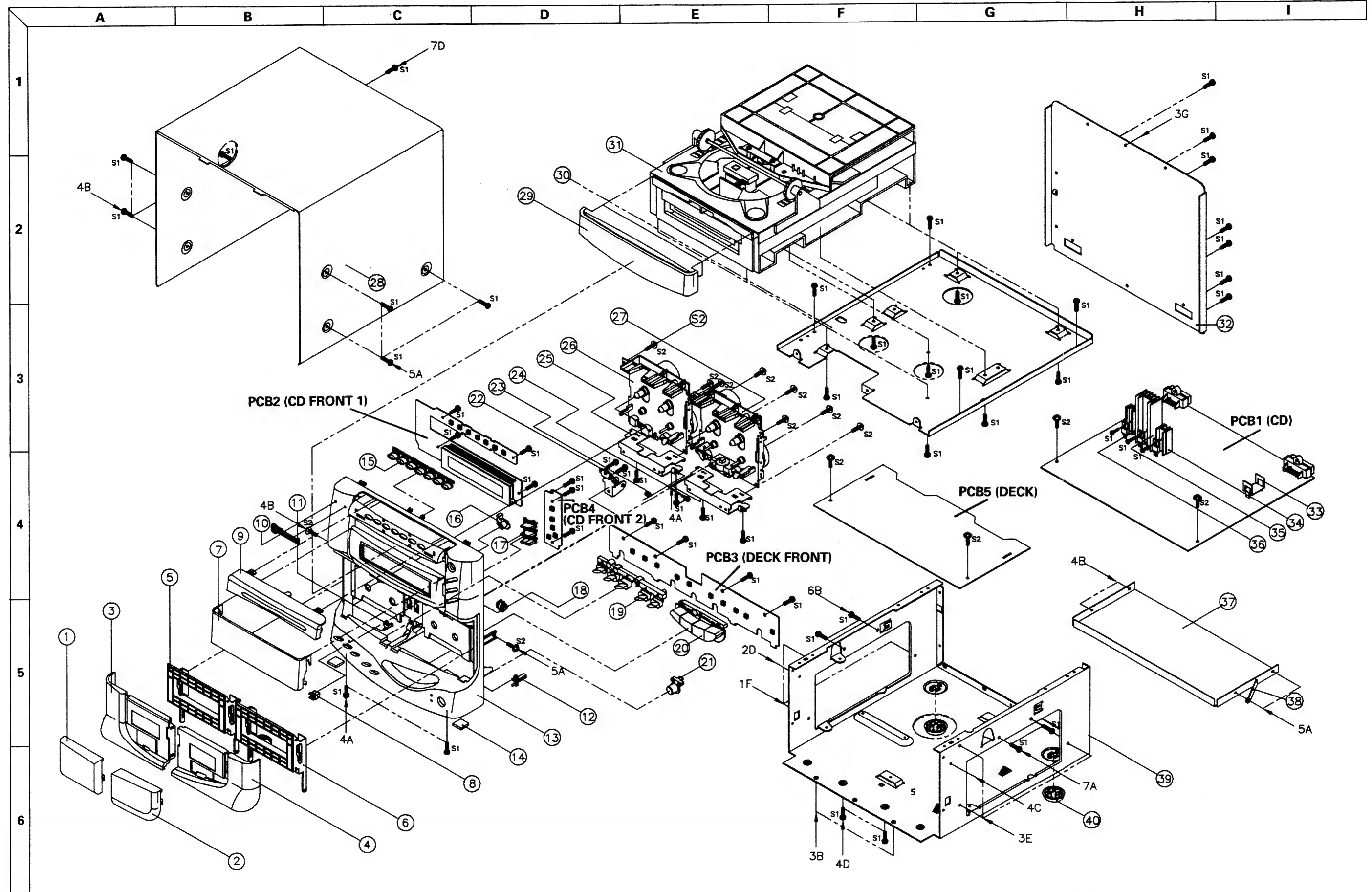
REF. NO.	DESCRIPTION	PARTS NO.	Q'TY	VERSION
	PACKAGE			
	FILM SOFT PE	632004002201	1	
	CUSHION POLY	623004374401	1	
	CABINET & CHASSIS			
1	DOOR WINDOW "A"		1	
2	DOOR WINDOW "B"	507704081301	1	
3	DOOR DECK "A"	504704154101	1	
4	DOOR DECK "B"	504704155101	1	
5	LID CASSETTE "A"	504004043101	1	
6	LID CASSETTE "B"	504004044101	1	
7	WINDOW DISPLAY	507004436101	1	
8	LOCKER	253004130301	2	
9	COVER FRONT	431004651101	1	
10	BADGE, SHERWOOD	563704066101	1	
(10)	BADGE, INKEL	563704067101	1	K(ONLY)
11	INDICATOR "A"	516004075301	1	
12	INDICATOR "B"	516004076301	1	
13	PANEL FRONT	306704213101	1	
14	FOOT CUSHION	405004464501	2	
15	BUTTON, 7KEY	509704640101	1	
16	BUTTON, 1KEY	509006667101	1	
17	BUTTON, 4KEY CD	509005901101	1	
18	DAMFER OIL	366004018301	2	
19	BUTTON, 5KEY	509005903101	1	
20	BUTTON, 4KEY DECK	509704638101	1	
21	BUTTON, DECK SELECTOR	509006665101	1	
22	GUIDE LID CASSETTE	432004378101	1	
23	SPRING DOOR "L"	372004365601	1	
24	SPRING DOOR "R"	372004366601	1	
25	BRACKET MECHA	401004358601	2	
26	DECK MECHA, P/B	815004141001	1	
27	DECK MECHA, R/B	815004142001	1	
28	COVER TOP	300704210603	1	
29	DOOR TRAY	504704257101	1	
30	BRACKET CHANGER	401004042601	1	
31	MECHA CHANGER, TCD-MB7T-AN	803004069201	1	
32	CHASSIS BACK	320704268601	1	PT INDO
(32)	CHASSIS BACK	320704268602	1	K(ONLY)
(32)	CHASSIS BACK	320704268603	1	D
33	HEATSINK, IC	307004626601	1	
34	HEATSINK, REGULATOR TR (15X30)	212004433801	1	
35	HEATSINK, REGULATOR TR (24X60)	212004430801	1	
36	HEATSINK, REGULATOR TR (24X30)	212004428801	1	
37	SHIELD FENCE	307004649601	1	
38	CLAMP WIRE	433004021301	1	
39	CHASSIS MAIN	320004476601	1	
40	FOOT	400004057101	2	
	HARDWARE KIT			
S1	SCREW, #8 BTT 3X8B	BQ20030083B1	50	
S2	SCREW #2 WPTC 3X8Y	B010530081W1	14	
	MISCELLANEOUS			
	CARD CABLE, YS-1.25-31-200-C (CN101 TO CN101)	L30118631205	1	
	CARD CABLE, YS-1.25-21-160-C (CN102 TO CN502)	L30118621165	1	
	CONNECTOR, 7P 26 mm (CN103 TO CN103)	L02207263832	1	
	CONNECTOR, 7P 200mm (CN505 TO PLAY BACK HEAD)	L01207208002	1	
	CONNECTOR, 3P 260mm	L02203265032	1	

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol Δ in the parts list are of special significance to safety. When replacing a component identified with Δ , use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

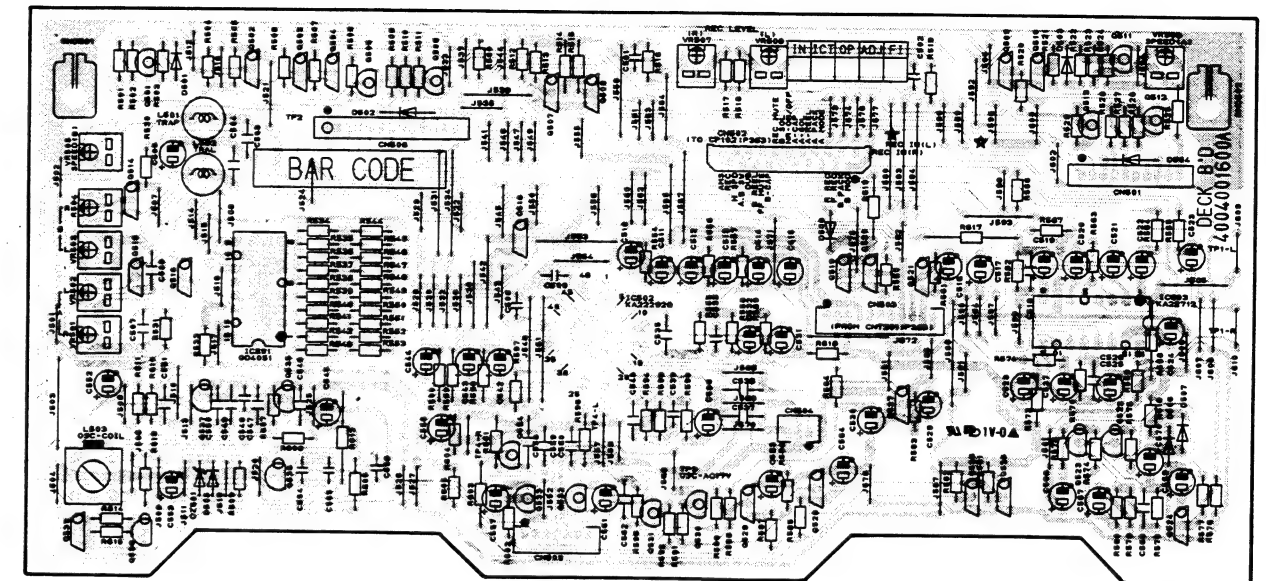
EXPLODED VIEW

Model No. : CCD-676

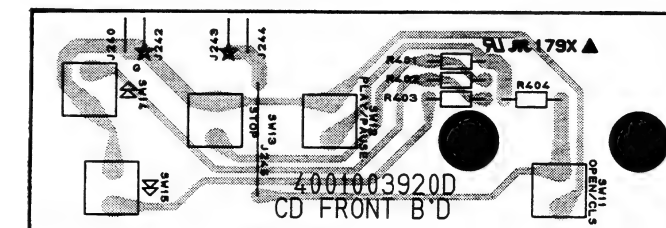


Model No. : CCD-676

PCB5 (DECK)



PCB4 (CD FRONT 2)



ELECTRICAL PARTS LIST

REF. NO.	DESCRIPTION	PARTS NO.	Q'TY	REF. NO.	DESCRIPTION	PARTS NO.	Q'TY	
PCB# ASSEMBLY P.C. BOARD CD				D129	ZENER, UZ 9.1BSC	K06009R12452	1	
CAPACITORS				D130	SWITCHING, 1N4148M	K00041480152	1	
C101/C102	ELECTROLYTIC SG	2200 μ F	25 V M D04022208420	1	D131	ZENER, UZ 5.1BSB	K06005R11452	1
C103	CERAMIC TUBULAR	0.022 μ F	25 V Z D00522357453	1	D132-D142	SWITCHING, 1N4148M	K00041480152	11
C104	CERAMIC TUBULAR	0.01 μ F	50 V Z D00510307753	1	INTEGRATED CIRCUITS			
C105/C106	ELECTROLYTIC SG	100 μ F	10 V M D04010108210	2	IC101	CXP82224-134Q, DWP332	J02082224134	1
C107	CERAMIC TUBULAR	0.022 μ F	25 V Z D00522357453	1	IC102	CXD2508Q	J03125080001	1
C108/C109	ELECTROLYTIC SG	100 μ F	10 V M D04010108210	2	IC103	CXA1782BQ	J03217820000	1
C110	CERAMIC TUBULAR	0.01 μ F	50 V Z D00510307753	1	IC104	KA9258D	J12792580000	1
C111/C112	ELECTROLYTIC SG	100 μ F	10 V M D04010108210	2	IC105/IC106	TA7291S	J12772910000	2
C113	CERAMIC TUBULAR	0.022 μ F	25 V Z D00522357453	1	IC107	KIA4559S/KIA75559S	J12145590000	1
C114	MYLAR	0.033 μ F	100 V J D02033306C06	1	IC108	KA7808, REGULATOR	J12678080006	1
C115/C116	CERAMIC TUBULAR	0.01 μ F	50 V Z D00510307753	2	IC109/IC110	KA7812, REGULATOR	J12678012000	2
C117	MYLAR	0.1 μ F	250 V J D02010407H08	1	COILS			
C118	ELECTROLYTIC SG	22 μ F	16 V M D04022008310	1	L101-L104	INDUCTOR, 10 μ H	D33010000102	4
C119	ELECTROLYTIC SG	100 μ F	10 V M D04010108210	1	TRANSISTORS			
C120	CERAMIC TUBULAR	0.022 μ F	25 V Z D00522357453	1	Q101	BKTA1267Y, PNP	J5001267Y005	1
C121	MYLAR	0.033 μ F	100 V J D02033306C06	1	Q102-Q105	DTC323TS, NPN	J602323TS005	4
C122	ELECTROLYTIC SG	4.7 μ F	50 V M D0404R708710	1	Q106-Q109	DTA114YS	J601114YS005	4
C123	CERAMIC TUBULAR	0.01 μ F	50 V Z D00510307753	1	Q110	MPSA56, PNP	J5005600Y005	1
C124	CERAMIC TUBULAR	0.002 μ F	16 V Z D00522277353	1	Q111	BKTC3199, NPN	J5023199Y005	1
C125	MYLAR	0.1 μ F	250 V J D02010407H08	1	Q112-Q115	DTC114YS	J60201140005	4
C126	MYLAR	0.033 μ F	100 V J D02033306C06	1	RESISTORS			
C127	ELECTROLYTIC SG	47 μ F	16 V M D04047008310	1	R101	METAL FILM	1 kohm 1/5 W J C06001026P52	1
C128	MYLAR	0.1 μ F	250 V J D02010407H08	1	R102	METAL FILM	470 ohm 1/5 W J C06004716P52	1
C129	MYLAR	0.1 μ F	250 V J D02010407H08	1	R103	CARBON FILM	100 kohm 1/5 W J C00001046P52	1
C130	ELECTROLYTIC SG	22 μ F	16 V M D04022008310	1	R104	METAL FILM	470 ohm 1/5 W J C06004716P52	1
C131	ELECTROLYTIC SG	470 μ F	10 V M D04047108210	1	R105	CARBON FILM	22 kohm 1/5 W J C00002236P52	1
C132	ELECTROLYTIC SG	3.3 μ F	50 V M D0403R308710	1	R106	CARBON FILM	100 kohm 1/5 W J C00001046P52	1
C133	MYLAR	0.047 μ F	100 V J D02047306C06	1	R107	METAL FILM	100 ohm 1/5 W J C06001016P52	1
C134	ELECTROLYTIC SG	47 μ F	16 V M D04047008310	1	R108	CARBON FILM	22 kohm 1/5 W J C00002236P52	1
C135	CERAMIC TUBULAR	0.022 μ F	25 V Z D00522357453	1	R109	METAL FILM	22 ohm 1/5 W J C06002206P52	1
C136	ELECTROLYTIC SG	100 μ F	10 V M D04010108210	1	R110	CARBON FILM	27 kohm 1/5 W J C00002736P52	1
C137	CERAMIC TUBULAR	0.022 μ F	25 V Z D00522357453	1	R111/R112	CARBON FILM	10 kohm 1/5 W J C00001036P52	2
C138	ELECTROLYTIC SG	10 μ F	50 V M D04010008710	1	R113	CARBON FILM	5.6 kohm 1/5 W J C00005626P52	1
C139	ELECTROLYTIC SG	47 μ F	16 V M D04047008310	1	R114	METAL FILM	2.7 kohm 1/5 W J C06002726P52	1
C140	ELECTROLYTIC SG	100 μ F	10 V M D04010108210	1	R115/R116	CARBON FILM	10 kohm 1/5 W J C00001036P52	2
C141	MYLAR	0.002 μ F	100 V J D02015206C06	1	R117	METAL FILM	1 ohm 1/5 W J C06000106P52	1
C142	CERAMIC TUBULAR	0.01 μ F	50 V Z D00510307753	1	R118/R119	CARBON FILM	10 kohm 1/5 W J C00001036P52	2
C143	ELECTROLYTIC SG	100 μ F	10 V M D04010108210	1	R120	CARBON FILM	100 kohm 1/5 W J C00001046P52	1
C144	ELECTROLYTIC SG	47 μ F	16 V M D04047008310	1	R121	CARBON FILM	82 kohm 1/5 W J C00008236P52	1
C145	CERAMIC TUBULAR	220 μ F	50 V J D00522107753	1	R122	CARBON FILM	68 kohm 1/5 W J C00006836P52	1
C146	CERAMIC TUBULAR	0.01 μ F	50 V Z D00510307753	1	R123	CARBON FILM	82 kohm 1/5 W J C00008236P52	1
C147/C148	CERAMIC TUBULAR	120 μ F	50 V J D00512107753	2	R124	CARBON FILM	5.6 kohm 1/5 W J C00005626P52	1
C149	CERAMIC TUBULAR	0.022 μ F	25 V Z D00522357453	1	R125	CARBON FILM	120 kohm 1/5 W J C00001246P52	1
C150/C151	CERAMIC TUBULAR	120 μ F	50 V J D00512107753	2	R126	CARBON FILM	680 kohm 1/5 W J C00006846P52	1
C152	ELECTROLYTIC SG	10 μ F	50 V M D04010008710	1	R127	CARBON FILM	33 kohm 1/5 W J C00003336P52	1
C153	ELECTROLYTIC SG	4.7 μ F	50 V M D0404R708710	1	R128	CARBON FILM	470 kohm 1/5 W J C00004746P52	1
C154-C157	CERAMIC TUBULAR	120 μ F	50 V J D00512107753	4	R129	CARBON FILM	47 kohm 1/5 W J C00004736P52	1
C158	ELECTROLYTIC SG	100 μ F	10 V M D04010108210	1	R130	CARBON FILM	15 kohm 1/5 W J C00001536P52	1
C159	CERAMIC TUBULAR	100 μ F	50 V J D00110107753	1	R131	METAL FILM	2.7 kohm 1/5 W J C06002726P52	1
C160/C161	CERAMIC TUBULAR	120 μ F	50 V J D00512107753	2	R132	CARBON FILM	8.2 kohm 1/5 W J C00008226P52	1
C162/C163	CERAMIC DISC CH	33 μ F	50 V J D00033016707	2	R133	METAL FILM	4.7 kohm 1/5 W J C06004726P52	1
C164	ELECTROLYTIC SG	47 μ F	16 V M D04047008310	1	R134/R135	METAL FILM	470 ohm 1/5 W J C06004716P52	2
C165	CERAMIC TUBULAR	0.022 μ F	25 V Z D00522357453	1	R136	METAL FILM	4.7 ohm 1/5 W J C0604R706P52	1
C166	ELECTROLYTIC SG	47 μ F	16 V M D04047008310	1	R137/R138	CARBON FILM	47 kohm 1/5 W J C00004736P52	2
C167	ELECTROLYTIC SG	1 μ F	50 V M D04001008710	1	R139	METAL FILM	3.3 kohm 1/5 W J C06003326P52	1
C168	ELECTROLYTIC SG	3.3 μ F	50 V M D0403R308710	1	R140	METAL FILM	1 ohm 1/5 W J C06000106P52	1
C169	ELECTROLYTIC SG	100 μ F	10 V M D04010108210	1	R141	METAL FILM	3.3 kohm 1/5 W J C06003326P52	1
C170	ELECTROLYTIC SG	22 μ F	16 V M D04022008310	1	R142	CARBON FILM	22 kohm 1/5 W J C00002236P52	1
C171	ELECTROLYTIC SG	3.3 μ F	50 V M D0403R308710	1	R143	CARBON FILM	10 kohm 1/5 W J C00001036P52	1
C172	ELECTROLYTIC SG	1 μ F	50 V M D04001008710	1	R144	CARBON FILM	22 kohm 1/5 W J C00002236P52	1
C173	MYLAR	0.047 μ F	100 V J D02047306C06	1	R145	CARBON FILM	47 kohm 1/5 W J C00004736P52	1
C174	ELECTROLYTIC SG	1 μ F	50 V M D04001008710	1	R146	METAL FILM	220 ohm 1/5 W J C06002216P52	1
C175	CERAMIC TUBULAR	0.022 μ F	25 V Z D00522357453	1	R147	METAL FILM	1 kohm 1/5 W J C06001026P52	1
C176	ELECTROLYTIC SG	100 μ F	10 V M D04010108210	1	R148	CARBON FILM	39 kohm 1/5 W J C00003936P52	1
C177	ELECTROLYTIC SG	10 μ F	50 V M D04010008710	1	R149	METAL FILM	10 ohm 1/5 W J C06001006P52	1
C178	CERAMIC TUBULAR	0.1 μ F	50 V Z D00510409753	1	R150	CARBON FILM	39 kohm 1/5 W J C00003936P52	1
C179	CERAMIC TUBULAR	0.022 μ F	25 V Z D00522357453	1	R151	CARBON FILM	47 kohm 1/5 W J C00004736P52	1
C180	ELECTROLYTIC SG	10 μ F	50 V M D04010008710	1	R152	CARBON FILM	1 Mohm 1/5 W J C00001056P52	1
C181	CERAMIC TUBULAR	470 μ F	50 V J D00547107753	1	R153/R154	CARBON FILM	47 kohm 1/5 W J C00004736P52	2
CONNECTORS				R155	CARBON FILM	100 kohm 1/5 W J C00001046P52	1	
CN101	PLUG, FFC-52045-31		L13152045310	1	R156	CARBON FILM	10 kohm 1/5 W J C00001036P52	1
CN102	PLUG, FPC 21P		L13183700210	1	R157	CARBON FILM	39 kohm 1/5 W J C00003936P52	1
CN103	PLUG, GIL-S-7P-S2T2		L10122007000	1	R158-R161	CARBON FILM	33 kohm 1/5 W J C00003336P52	4
CN104	PLUG, GIL-S-6P-S2T2		L10122006000	1	R162	CARBON FILM	39 kohm 1/5 W J C00003936P52	1
CN105	LEAD ASSY, 11P 180mm		L02211183332	1	R163-R166	CARBON FILM	47 kohm 1/5 W J C00004736P52	4
CT106	LEAD ASSY, 5P 180mm		L01205187782	1	R167-R170	CARBON FILM	33 kohm 1/5 W J C00003336P52	4
CT107	LEAD ASSY, 8P 200mm		L01208202132	1	R171	METAL FILM	1 kohm 1/5 W J C06001026P52	1
CT108	LEAD ASSY, 12P 180mm		L01212182132	1	R172	METAL FILM	470 ohm 1/5 W J C06004716P52	1
CT109	LEAD ASSY, 4P 180mm		L01204182132	1	R173-R176	CARBON FILM	10 kohm 1/5 W J C00001036P52	4
CT110	LEAD ASSY, 6P 180mm		L01206182132	1	R177	CARBON FILM	1 Mohm 1/5 W J C00001056P52	1
SYSTEM1	SYSTEM CONNECTOR, 9P		L14052303090	1	R178-R181	CARBON FILM	12 kohm 1/5 W J C00001236P52	4
SYSTEM2	SYSTEM CONNECTOR, 11P		L14052303110	1	R182	METAL FILM	1 kohm 1/5 W J C06001026P52	1
DIODES				R183	METAL FILM	4.7 kohm 1/5 W J C06004726P52	1	
D101/D102	SWITCHING, 1N4148M		K00041480152	2	R184	METAL FILM	150 ohm 1/5 W J C06001516P52	1
D103	ZENER, UZ 5.6BSB		K06005R61452	1	R185	METAL FILM	1 kohm 1/5 W J C06001026P52	1
D104	SWITCHING, 1N4148M		K00041480152	1	R186	CARBON FILM	47 kohm 1/5 W J C00004736P52	1
D105-D108	RECTIFIER, 1N4003		K04040030052	4				
D109-D128	SWITCHING, 1N4148M		K00041480152	10				

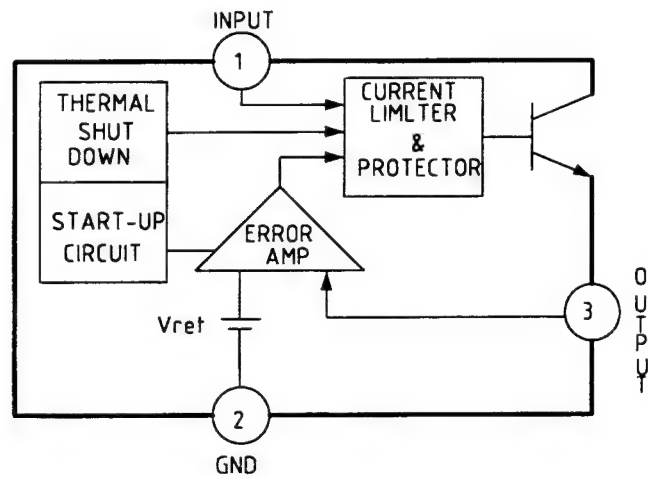
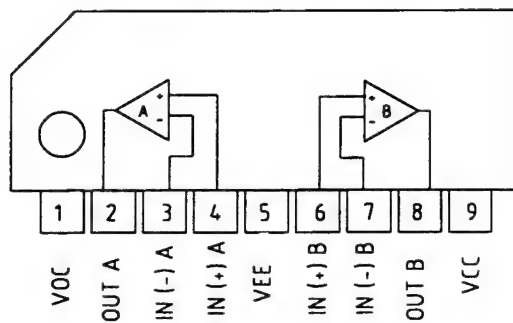
REF. NO.	DESCRIPTION	PARTS NO.	Q'TY
R187	METAL FILM 150 ohm 1/5 W J	C06001516P52	1
R188/R189	CARBON FILM 47 kohm 1/5 W J	C00004736P52	2
R190	METAL FILM 150 ohm 1/5 W J	C06001516P52	1
R191-R196	CARBON FILM 47 kohm 1/5 W J	C00004736P52	6
R197	METAL FILM 1 kohm 1/5 W J	C06001026P52	1
R198	CARBON FILM 47 kohm 1/5 W J	C00004736P52	1
R199	METAL FILM 1 kohm 1/5 W J	C06001026P52	1
MISCELLANEOUS			
X101	CRYSTAL, 16.9344MHz	E80016934446	1
X102	RESONATOR, CST10.0MTW-TF01	E83010000005	1
SW16	SWITCH TACT, SKHV10910D01 KB581	G18004050001	1
SW17	SWITCH TACT, SKHV10910D01 KB581	G18004050001	1
SW18	SWITCH TACT, SKHV10910D01 KB581	G18004050001	1
SW19	SWITCH TACT, SKHV10910D01 KB581	G18004050001	1
SW20	SWITCH TACT, SKHV10910D01 KB581	G18004050001	1
SW21	SWITCH TACT, SKHV10910D01 KB581	G18004050001	1
SW22	SWITCH TACT, SKHV10910D01 KB581	G18004050001	1
SW23	SWITCH TACT, SKHV10910D01 KB581	G18004050001	1
SW24	SWITCH TACT, SKHV10910D01 KB581	G18004050001	1
33	HEATSINK, IC	307004626601	1
34	HEATSINK, REGULATOR TR (15X30)	212004433801	1
35	HEATSINK, REGULATOR TR (24X60)	212004430801	1
36	HEATSINK, REGULATOR TR (24X30)	212004428801	1
	CONNECTOR, 2P, 140mm	L02202143632	1
	WIRE, HI-WP #24BK FF140	L04624101444	1
	TERMINAL GROUND	379004069601	1
PCB2 ASSEMBLY P.C. BOARD CD FRONT1			
CAPACITORS			
C201	ELECTROLYTIC SG 47 μ F 16 V M	D04047008310	1
C202	ELECTROLYTIC SG 100 μ F 10 V M	D04010108210	1
CONNECTORS			
CN101	PLUG, FPC-52044-31	L13152044310	1
CN103	PLUG, GIL-07P-S2L2-EF	L10122007001	1
INTEGRATED CIRCUITS			
IC201/IC202	MC14094BCP	J04014094000	2
TRANSISTORS			
Q201-Q214	DTC114YS	J60201140005	4
RESISTORS			
R200	CARBON FILM 47 kohm 1/5 W J	C00004736P52	1
R201	METAL FILM 1 kohm 1/5 W J	C06001026P52	1
R202	CARBON FILM 10 kohm 1/5 W J	C00001036P52	1
R203	CARBON FILM 47 kohm 1/5 W J	C00004736P52	1
R204	METAL FILM 1 kohm 1/5 W J	C06001026P52	1
R205	CARBON FILM 47 kohm 1/5 W J	C00004736P52	1
R206	METAL FILM 1 kohm 1/5 W J	C06001026P52	1
R207	CARBON FILM 47 kohm 1/5 W J	C00004736P52	1
R208	METAL FILM 1 kohm 1/5 W J	C06001026P52	1
R209	CARBON FILM 470 kohm 1/5 W J	C00004746P52	1
R210	METAL FILM 2.2 ohm 1/5 W J	C0602R206P52	1
R211	METAL FILM 1 kohm 1/5 W J	C06001026P52	1
R212	METAL FILM 2.2 ohm 1/5 W J	C0602R206P52	1
R213/R214	METAL FILM 1 kohm 1/5 W J	C06001026P52	2
R215	METAL FILM 1.5 kohm 1/5 W J	C06001526P52	1
R216	METAL FILM 2.7 kohm 1/5 W J	C06002726P52	1
R217/R218	METAL FILM 3.6 kohm 1/5 W J	C06003626P52	2
R219	CARBON FILM 10 kohm 1/5 W J	C00001036P52	1
R220	CARBON FILM 24 kohm 1/5 W J	C00002436P52	1
R221	METAL FILM 270 ohm 1/5 W J	C06002716P52	1
R222	METAL FILM 150 ohm 1/5 W J	C06001516P52	1
R223	METAL FILM 270 ohm 1/5 W J	C06002716P52	1
R224	METAL FILM 1 kohm 1/5 W J	C06001026P52	1
R225	METAL FILM 150 ohm 1/5 W J	C06001516P52	1
R226	METAL FILM 270 ohm 1/5 W J	C06002716P52	1
R227	METAL FILM 150 ohm 1/5 W J	C06001516P52	1
R228	METAL FILM 270 ohm 1/5 W J	C06002716P52	1
R229	METAL FILM 150 ohm 1/5 W J	C06001516P52	1
R230	METAL FILM 270 ohm 1/5 W J	C06002716P52	1
R231	METAL FILM 150 ohm 1/5 W J	C06001516P52	1
R232	METAL FILM 270 ohm 1/5 W J	C06002716P52	1
R233	METAL FILM 150 ohm 1/5 W J	C06001516P52	1
R234	METAL FILM 270 ohm 1/5 W J	C06002716P52	1
R235	METAL FILM 150 ohm 1/5 W J	C06001516P52	1
R237	CARBON FILM 15 kohm 1/5 W J	C00001536P52	1
R238/R239	CARBON FILM 24 kohm 1/5 W J	C00002436P52	2
R240	METAL FILM 1 kohm 1/5 W J	C06001026P52	1
R243	CARBON FILM 10 kohm 1/5 W J	C00001036P52	1
MISCELLANEOUS			
SW16	SWITCH TACT, SKHV10910D01 KB581, 1	G18004050001	1
SW17	SWITCH TACT, SKHV10910D01 KB581, 2	G18004050001	1
SW18	SWITCH TACT, SKHV10910D01 KB581, 3	G18004050001	1
SW19	SWITCH TACT, SKHV10910D01 KB581, 4	G18004050001	1
SW20	SWITCH TACT, SKHV10910D01 KB581, 5	G18004050001	1
SW21	SWITCH TACT, SKHV10910D01 KB581, 6	G18004050001	1
SW22	SWITCH TACT, SKHV10910D01 KB581, 7	G18004050001	1

REF. NO.	DESCRIPTION	PARTS NO.	Q'TY
PCB3 ASSEMBLY P.C. BOARD DECK FRONT			
LED301	LED, SLR-34GCN49	K50003510123	1
LED302	LED, SLR-34GCN49	K50003510123	1
LED303	LED, SLR-34GCN49	K50003510123	1
CT104	CNT, LEAD ASSY 6P 200mm	L02206202132	1
R301	RES, METAL FILM 1.5 kohm 1/5 W J	C06001526P52	1
R302	RES, METAL FILM 2.7 kohm 1/5 W J	C06002726P52	1
R303	RES, METAL FILM 3.6 kohm 1/5 W J	C06003626P52	1
R304	RES, CARBON FILM 5.6 kohm 1/5 W J	C00005626P52	1
R305	RES, METAL FILM 1.5 kohm 1/5 W J	C06001526P52	1
R306	RES, METAL FILM 2.7 kohm 1/5 W J	C06002726P52	1
R307	RES, METAL FILM 3.6 kohm 1/5 W J	C06003626P52	1
R308	RES, CARBON FILM 5.6 kohm 1/5 W J	C00005626P52	1
SW1	SWITCH TACT, SKHV10910D01 KB581, PAUSE	G18004050001	1
SW2	SWITCH TACT, SKHV10910D01 KB581, STOP	G18004050001	1
SW3	SWITCH TACT, SKHV10910D01 KB581, B. PLAY	G18004050001	1
SW4	SWITCH TACT, SKHV10910D01 KB581, F. PLAY	G18004050001	1
SW5	SWITCH TACT, SKHV10910D01 KB581, DECK 1.2	G18004050001	1
SW6	SWITCH TACT, SKHV10910D01 KB581, DUBBING	G18004050001	1
SW7	SWITCH TACT, SKHV10910D01 KB581, CD SYN R	G18004050001	1
SW8	SWITCH TACT, SKHV10910D01 KB581, SEC/MUT	G18004050001	1
SW9	SWITCH TACT, SKHV10910D01 KB581, ◀ ▶	G18004050001	1
SW10	SWITCH TACT, SKHV10910D01 KB581, ▶ ▶	G18004050001	1
PCB4 ASSEMBLY P.C. BOARD CD FRONT2			
R401	RES, METAL FILM 2.7 kohm 1/5 W J	C06002726P52	1
R402	RES, METAL FILM 3.6 kohm 1/5 W J	C06003626P52	1
R403	RES, CARBON FILM 5.6 kohm 1/5 W J	C00005626P52	1
R404	RES, METAL FILM 1.5 kohm 1/5 W J	C06001526P52	1
SW11	SWITCH TACT, SKHV10910D01 KB581, OPEN/CL	G18004050001	1
SW12	SWITCH TACT, SKHV10910D01 KB581, PLAY/PA	G18004050001	1
SW13	SWITCH TACT, SKHV10910D01 KB581, STOP	G18004050001	1
SW14	SWITCH TACT, SKHV10910D01 KB581, B. SKIP	G18004050001	1
SW15	SWITCH TACT, SKHV10910D01 KB581, F. SKIP	G18004050001	1
PCB5 ASSEMBLY P.C. BOARD DECK			
CAPACITORS			
C501/C502	MYLAR 0.008 μ F 100 V J	D02082206C06	2
C503/C504	CERAMIC TUBULAR 0.002 μ F 16 V Z	D00522277353	2
C505	ELECTROLYTIC SG 10 μ F 50 V M	D04010008710	1
C506	CERAMIC TUBULAR 820 pF 50 V J	D00582107753	1
C507	CERAMIC TUBULAR 820 pF 50 V J	D00582107753	1
C508/C509	MYLAR 0.033 μ F 100 V J	D02033306C06	2
C510	ELECTROLYTIC SG 100 μ F 10 V M	D04010108210	1
C511	ELECTROLYTIC SG 4.7 μ F 50 V M	D0404R708710	1
C512/C513	ELECTROLYTIC SG 47 μ F 25 V M	D04047008410	2
C514	ELECTROLYTIC SG 220 μ F 10 V M	D04022108210	1
C515	ELECTROLYTIC SG 47 μ F 25 V M	D04047008410	1
C516	ELECTROLYTIC SG 2.2 μ F 50 V M	D0402R208710	1
C517	ELECTROLYTIC SG 3.3 μ F 50 V M	D0403R308710	1
C518	CERAMIC TUBULAR 0.002 μ F 16 V Z	D00522277353	1
C519	ELECTROLYTIC SG 4.7 μ F 50 V M	D0404R708710	1
C520	ELECTROLYTIC SG 3.3 μ F 50 V M	D0403R308710	1
C521	ELECTROLYTIC SG 0.68 μ F 50 V M	D040R608710	1
C522/C523	ELECTROLYTIC SG 4.7 μ F 50 V M	D0404R708710	2
C524	ELECTROLYTIC SG 0.68 μ F 50 V M	D040R608710	1
C525	ELECTROLYTIC SG 4.7 μ F 16 V M	D04047008310	1
C526	CERAMIC TUBULAR 0.002 μ F 16 V Z	D00522277353	1
C527	ELECTROLYTIC SG 4.7 μ F 50 V M	D0404R708710	1
C528	ELECTROLYTIC SG 47 μ F 25 V M	D04047008410	1
C529	ELECTROLYTIC SG 2.2 μ F 50 V M	D0402R208710	1
C530	ELECTROLYTIC SG 22 μ F 50 V M	D04022008710	1
C531	ELECTROLYTIC SG 47 μ F 25 V M	D04047008410	1
C532	ELECTROLYTIC SG 22 μ F 35 V M	D04022008510	1
C533	MYLAR 0.015 μ F 100 V J	D02015306C06	1
C535	CERAMIC TUBULAR 330 pF 50 V J	D00533107753	1
C536/C537	CERAMIC TUBULAR 0.001 μ F 50 V Z	D00510207753	2
C538	ELECTROLYTIC SG 22 μ F 35 V M	D04022008510	1
C539	MYLAR 0.015 μ F 100 V J	D02015306C06	1
C540	CERAMIC TUBULAR 330 pF 50 V J	D00533107753	1
C542	ELECTROLYTIC SG 47 μ F 25 V M	D04047008410	1
C543	ELECTROLYTIC SG 4.7 μ F 50 V M	D0404R708710	1
C544	ELECTROLYTIC SG 100 μ F 10 V M	D04010108210	1
C545	ELECTROLYTIC SG 47 μ F 25 V M	D04047008410	1
C546	CERAMIC TUBULAR 10000 pF 16 V Z	D00510377353	1
C547	CERAMIC TUBULAR 0.001 μ F 50 V Z	D00510207753	1
C548	MYLAR 0.022 μ F 100 V J	D02022306C06	1
C549	CERAMIC TUBULAR 0.001 μ F 50 V Z	D00510207753	1
C550/C551	CERAMIC TUBULAR 10000 pF 16 V Z	D00510377353	2
C552	ELECTROLYTIC SG 100 μ F 10 V M	D04010108210	1
C553	ELECTROLYTIC SG 1 μ F 50 V M	D04001008710	1
C554	MYLAR 0.006 μ F 100 V J	D02056206C06	1
C555	MYLAR 0.047 μ F 100 V J	D02047306C06	1
C556	ELECTROLYTIC SG 4.7 μ F 50 V M	D0404R708710	1
C557	ELECTROLYTIC SG 10 μ F 50 V M	D04010008710	1
C558	CERAMIC TUBULAR 0.001 μ F 50 V Z	D00510207753	1
C559/C560	CERAMIC TUBULAR 330 pF 50 V J	D00533107753	2
C561	ELECTROLYTIC SG 10 μ F 50 V M	D04010008710	1
C562	CERAMIC TUBULAR 0.001 μ F 50 V Z	D00510207753	1
C563	ELECTROLYTIC SG 47 μ F 25 V M	D04047008410	1

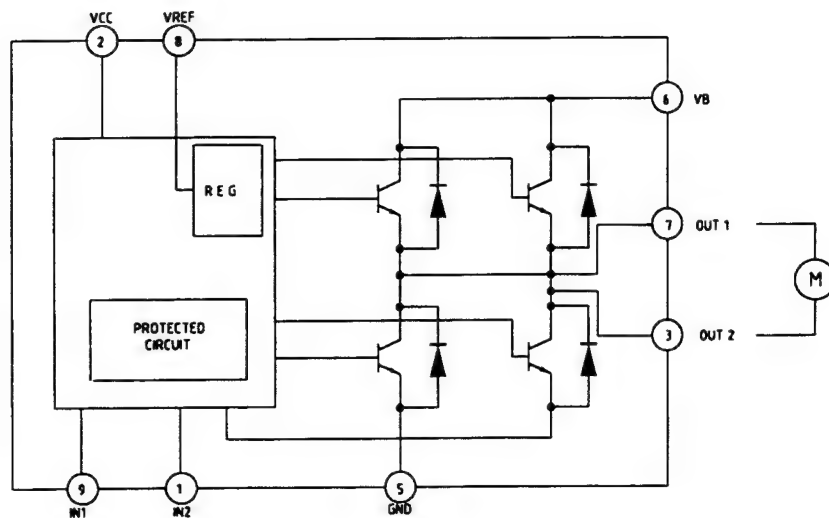
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C564	ELECTROLYTIC SG	22 μ F	35 V M D04022008510	1	R547	CARBON FILM	39 kohm 1/5 W J C00003936P52	1
C565	MYLAR	0.002 μ F	100 V J D02022206C06	1	R548	CARBON FILM	27 kohm 1/5 W J C00002736P52	1
C566/C567	ELECTROLYTIC SG	4.7 μ F	50 V M D0404R708710	2	R549/R550	CARBON FILM	150 kohm 1/5 W J C00001546P52	2
C568	CERAMIC TUBULAR	0.002 μ F	16 V Z D00522277353	1	R551	CARBON FILM	270 kohm 1/5 W J C00002746P52	1
C569	ELECTROLYTIC SG	0.1 μ F	50 V M D040R1008710	1	R552	CARBON FILM	22 kohm 1/5 W J C00002236P52	1
C570	ELECTROLYTIC SG	4.7 μ F	50 V M D0404R708710	1	R553	CARBON FILM	43 kohm 1/5 W J C00004336P52	1
	CONNECTORS			R554	METAL FILM	470 ohm 1/5 W J C06004716P52	1	
CN501	LEAD ASS'Y, 10P 120mm	L02410120732	1	R555	CARBON FILM	12 kohm 1/5 W J C00001236P52	1	
CN502	PLUG, FPC 21P	L13183700210	1	R556	METAL FILM	1 kohm 1/5 W J C06001026P52	1	
CN503	PLUG, GIL-S-11P-S2T2	L10122011000	1	R557	CARBON FILM	3.3 Mohm 1/5 W J C0000336P52	1	
CN504	PLUG, GIL-S-3P-S2T2	L10122003000	1	R558	CARBON FILM	10 kohm 1/5 W J C00001036P52	1	
CN505	PLUG, GIL-S-7P-S2T2	L10122007000	1	R559	METAL FILM	82 ohm 1/5 W J C06008206P52	1	
CN506	LEAD ASS'Y, 13P 120mm	L02413120732	1	R560	CARBON FILM	10 kohm 1/5 W J C00001036P52	1	
	DIODES			R561	METAL FILM	1 kohm 1/5 W J C06001026P52	1	
D501-D509	SWITCHING, 1N4148M	K00041480152	9	R562	METAL FILM	3.3 kohm 1/5 W J C06003326P52	1	
DZ501	ZENER, UZ 7.5BSC	K06007R52452	1	R563	CARBON FILM	47 kohm 1/5 W J C00004736P52	1	
	INTEGRATED CIRCUITS			R564/R565	CARBON FILM	7.5 kohm 1/5 W J C00007526P52	2	
IC501	KA22712, DOLBY B TYPE	J08122712000	1	R566	CARBON FILM	10 kohm 1/5 W J C00001036P52	1	
IC502	KA22292Q	J08122292000	1	R567	CARBON FILM	15 kohm 1/5 W J C00001536P52	1	
IC503	GD4051B	J04040510001	1	R568/R569	CARBON FILM	150 kohm 1/5 W J C00001546P52	2	
	COILS			R570	METAL FILM	3.3 kohm 1/5 W J C06003326P52	1	
L501/L502	TRAP BIAS, 389AC-K5094	D30201002000	2	R571	CARBON FILM	5.1 kohm 1/5 W J C00005126P52	1	
L503	OSC BIAS, CQN-K5174	E08001004000	1	R572	METAL FILM	100 ohm 1/5 W J C06001016P52	1	
	TRANSISTORS			R573	CARBON FILM	1 Mohm 1/5 W J C00001056P52	1	
Q501	MPSA56, PNP	J5005600Y005	1	R574	CARBON FILM	120 kohm 1/5 W J C00001246P52	1	
Q502-Q504	DTC114YS	J60201140005	3	R575	CARBON FILM	10 kohm 1/5 W J C00001036P52	1	
Q505/Q506	MPSA56, PNP	J5005600Y005	2	R576	METAL FILM	4.7 kohm 1/5 W J C06004726P52	1	
Q507-Q510	DTC114YS	J60201140005	4	R577	CARBON FILM	6.8 kohm 1/5 W J C00006826P52	1	
Q511-Q513	MPSA56, PNP	J5005600Y005	3	R578	METAL FILM	3.9 kohm 1/5 W J C06003926P52	1	
Q514/Q515	DTA114TS	J601114TS005	2	R579	METAL FILM	680 ohm 1/5 W J C06006816P52	1	
Q516	DTC114YS	J60201140005	1	R580	METAL FILM	33 ohm 1/5 W J C00003306P52	1	
Q518	DTC114YS	J60201140005	1	R581	METAL FILM	4.7 kohm 1/5 W J C06004726P52	1	
Q519/Q520	DTC114TS	J600114TS005	2	R582	METAL FILM	470 ohm 1/5 W J C06004716P52	1	
Q521	DTC114YS	J60201140005	1	R583	METAL FILM	1 kohm 1/5 W J C06001026P52	1	
Q522	KTA1015Y/BKTA1266, PNP	J5001266Y005	1	R584	CARBON FILM	33 kohm 1/5 W J C0000336P52	1	
Q523	KTC3198, NPN	J5023198B005	1	R585	METAL FILM	1 kohm 1/5 W J C06001026P52	1	
Q524-Q527	DTC114YS	J60201140005	4	R586	CARBON FILM	330 kohm 1/5 W J C00003346P52	1	
Q528/Q529	DTA114TS	J601114TS005	2	R587	METAL FILM	1 kohm 1/5 W J C06001026P52	1	
Q530-Q534	FET, 2SK117Y	J5441170Y005	4	R588	CARBON FILM	330 kohm 1/5 W J C00003346P52	1	
Q535	KTC2236A/KTC3205, NPN	J5023205Y005	1	R589	CARBON FILM	1 Mohm 1/5 W J C00001056P52	1	
Q536	KTC2400/BKTC3200, NPN	J5023200B005	1	R590	METAL FILM	82 ohm 1/5 W J C06008206P52	1	
Q537	KTC2236A/KTC3205, NPN	J5023205Y005	1	R591/R592	CARBON FILM	1 Mohm 1/5 W J C00001056P52	2	
Q538	KTC3198, NPN	J5023198B005	1	R593	CARBON FILM	10 kohm 1/5 W J C00001036P52	1	
Q539	DTC114YS	J60201140005	1	R594	CARBON FILM	12 kohm 1/5 W J C00001236P52	1	
	RESISTORS			R595	CARBON FILM	6.2 kohm 1/5 W J C00006226P52	1	
R500	METAL FILM	220 ohm 1/5 W J	C06002216P52	1	R596	CARBON FILM	100 kohm 1/5 W J C00001046P52	1
R501	METAL FILM	1.5 kohm 1/5 W J	C06001526P52	1	R597	CARBON FILM	18 kohm 1/5 W J C00001836P52	1
R502	METAL FILM	220 ohm 1/5 W J	C06002216P52	1	R598	METAL FILM	1 kohm 1/5 W J C06001026P52	1
R503	CARBON FILM	15 kohm 1/5 W J	C00001536P52	1	R599	CARBON FILM	10 kohm 1/5 W J C00001036P52	1
R504	CARBON FILM	10 kohm 1/5 W J	C00001036P52	1	R600	METAL FILM	470 ohm 1/5 W J C06004716P52	1
R505	CARBON FILM	47 kohm 1/5 W J	C00004736P52	1	R601	CARBON FILM	6.2 kohm 1/5 W J C00006226P52	1
R506	METAL FILM	750 ohm 1/5 W J	C06007516P52	1	R602/R603	CARBON FILM	1 Mohm 1/5 W J C00001056P52	2
R507	METAL FILM	750 ohm 1/5 W J	C06007516P52	1	R604	CARBON FILM	100 kohm 1/5 W J C00001046P52	1
R508	CARBON FILM	47 kohm 1/5 W J	C00004736P52	1	R605	METAL FILM	1 kohm 1/5 W J C06001026P52	1
R509	CARBON FILM	68 kohm 1/5 W J	C00006836P52	1	R606	METAL FILM	10 ohm 1/5 W J C06001006P52	1
R510	METAL FILM	750 ohm 1/5 W J	C06007516P52	1	R607	METAL FILM	4.7 kohm 1/5 W J C06004726P52	1
R511	CARBON FILM	47 kohm 1/5 W J	C00004736P52	1	R608	METAL FILM	3.3 kohm 1/5 W J C06003326P52	1
R512	METAL FILM	1 kohm 1/5 W J	C06001026P52	1	R609	CARBON FILM	10 kohm 1/5 W J C00001036P52	1
R513-R515	CARBON FILM	10 kohm 1/5 W J	C00001036P52	2	R610	METAL FILM	4.7 kohm 1/5 W J C06004726P52	1
R516	CARBON FILM	6.8 kohm 1/5 W J	C00006826P52	1	R611	METAL FILM	10 ohm 1/5 W J C06001006P52	1
R517/R518	CARBON FILM	10 kohm 1/5 W J	C00001036P52	2	R612	METAL FILM	1 kohm 1/5 W J C06001026P52	1
R519	CARBON FILM	6.8 kohm 1/5 W J	C00006826P52	1	R613	METAL FILM	4.7 kohm 1/5 W J C06004726P52	1
R520/R521	METAL FILM	750 ohm 1/5 W J	C06007516P52	2	R614/R615	CARBON FILM	5.1 kohm 1/5 W J C00005126P52	2
R522	CARBON FILM	15 kohm 1/5 W J	C00001536P52	1	R616	METAL FILM	3.3 kohm 1/5 W J C06003326P52	1
R523	METAL FILM	1.5 kohm 1/5 W J	C06001526P52	1	R617	CARBON FILM	5.1 kohm 1/5 W J C00005126P52	1
R524/R525	METAL FILM	220 ohm 1/5 W J	C06002216P52	2	R618	METAL FILM	100 ohm 1/5 W J C06001016P52	1
R526	CARBON FILM	47 kohm 1/5 W J	C00004736P52	1	R619	CARBON FILM	10 kohm 1/5 W J C00001036P52	1
R527	METAL FILM	750 ohm 1/5 W J	C06007516P52	1		SEMI FIXED VAREABLE RESISTORS		
R528	CARBON FILM	68 kohm 1/5 W J	C00006836P52	1	VR501-VR504	20K(B)-H	C54120311500	4
R529	CARBON FILM	47 kohm 1/5 W J	C00004736P52	1	VR505	500(B)-H	C54150111500	1
R530	CARBON FILM	10 kohm 1/5 W J	C00001036P52	1	VR506/VR507	20K(B)-H	C54120311500	2
R531	METAL FILM	1 kohm 1/5 W J	C06001026P52	1	VR508	500(B)-H	C54150111500	1
R533	CARBON FILM	10 kohm 1/5 W J	C00001036P52	1		MISCELLANEOUS		
R534	CARBON FILM	51 kohm 1/5 W J	C00005136P52	1		TERMINAL GROUND	379004069601	2
R535	CARBON FILM	75 kohm 1/5 W J	C00007536P52	1				
R536	CARBON FILM	180 kohm 1/5 W J	C00001846P52	1				
R537	CARBON FILM	68 kohm 1/5 W J	C00006836P52	1				
R538	CARBON FILM	24 kohm 1/5 W J	C00002436P52	1				
R539	CARBON FILM	51 kohm 1/5 W J	C00005136P52	1				
R540	CARBON FILM	82 kohm 1/5 W J	C00008236P52	1				
R541	CARBON FILM	150 kohm 1/5 W J	C00001546P52	1				
R542	CARBON FILM	43 kohm 1/5 W J	C00004336P52	1				
R543	CARBON FILM	47 kohm 1/5 W J	C00004736P52	1				
R544	CARBON FILM	150 kohm 1/5 W J	C00001546P52	1				
R545	CARBON FILM	120 kohm 1/5 W J	C00001246P52	1				
R546	CARBON FILM	330 kohm 1/5 W J	C00003346P52	1				

IC'S FUNCTIONAL BLOCK DIAGRAM

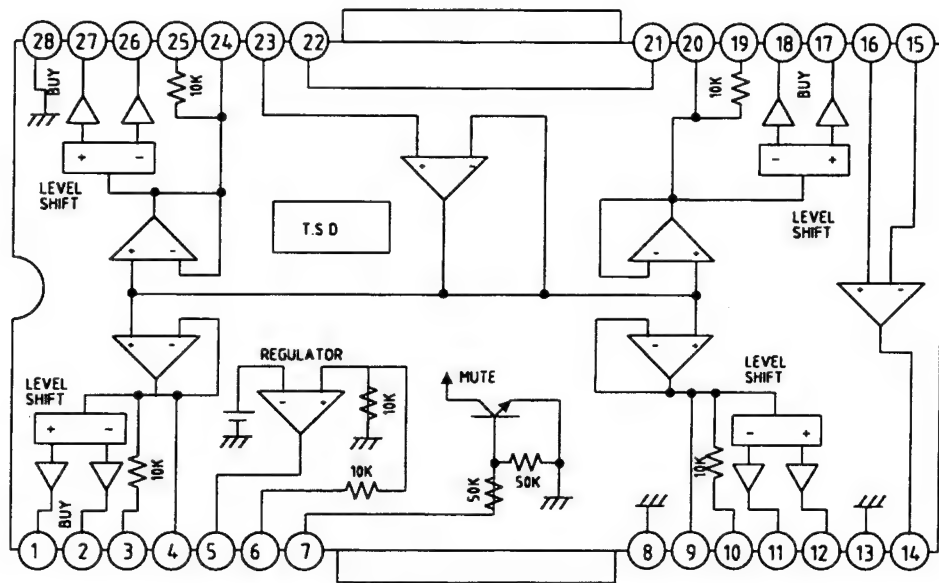
KA78 : IC108, IC109, IC110

**KIA 4559S : IC107**

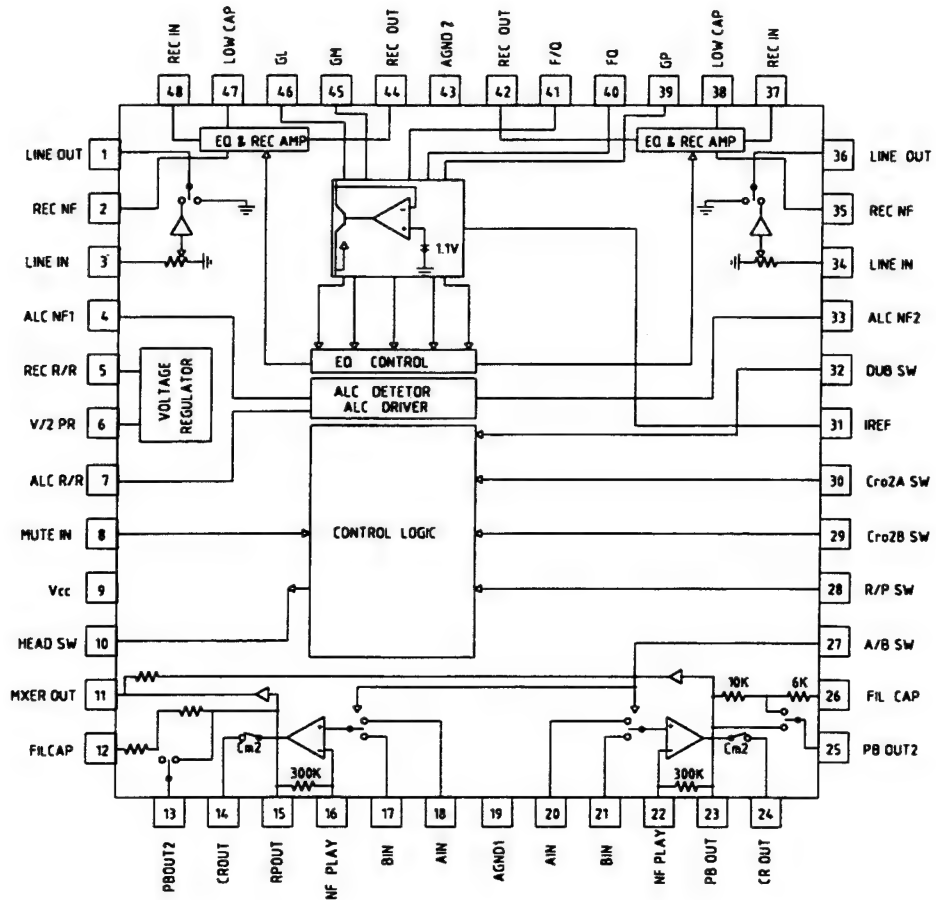
TA 7291S : IC105,IC106



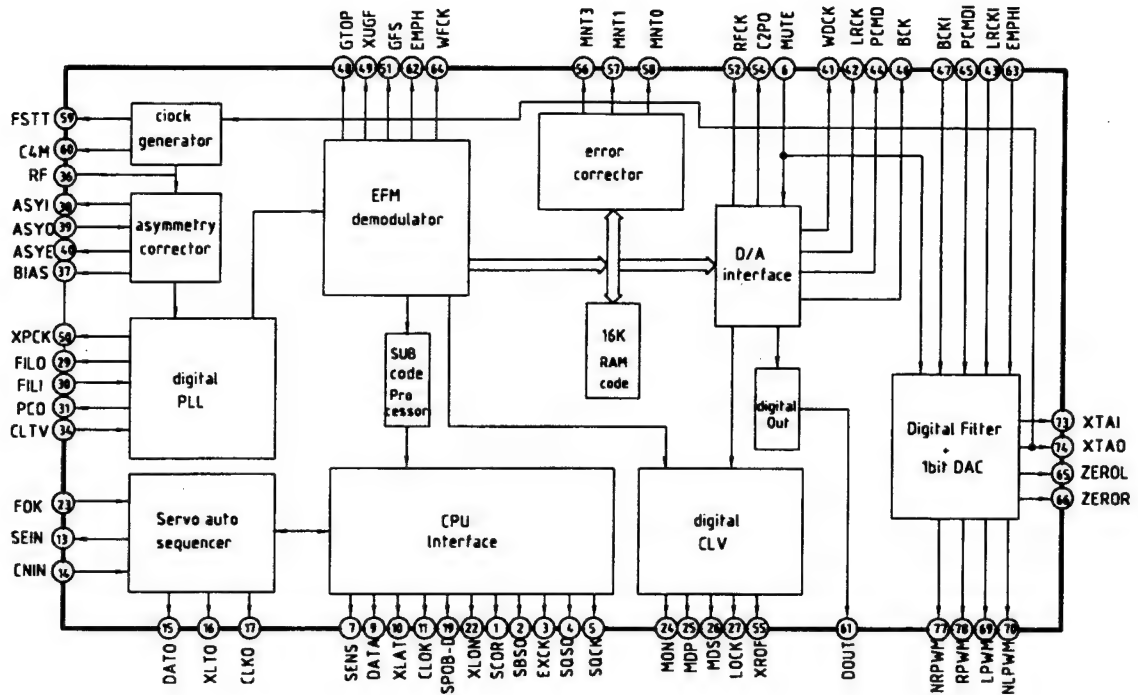
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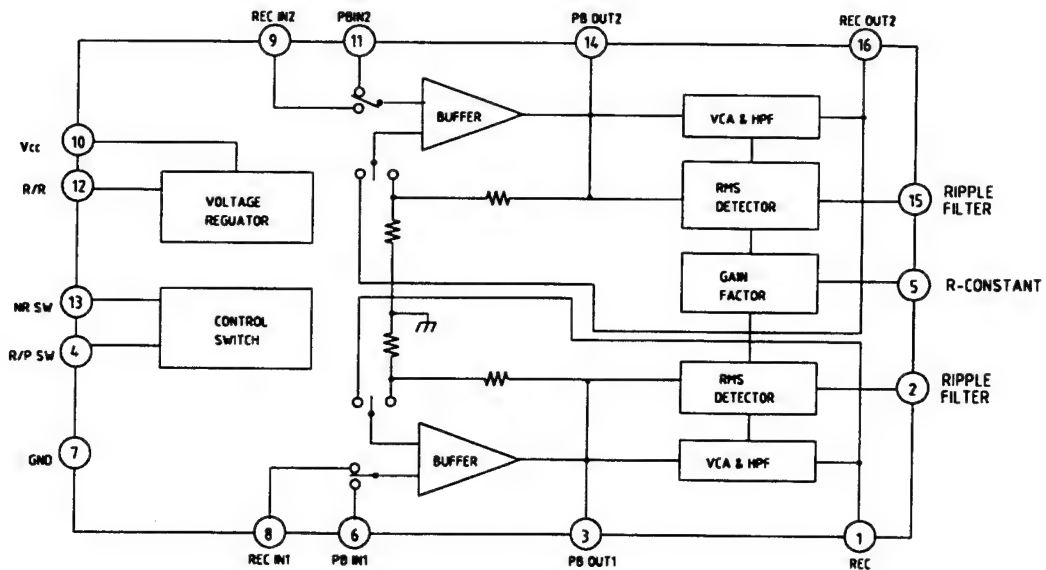
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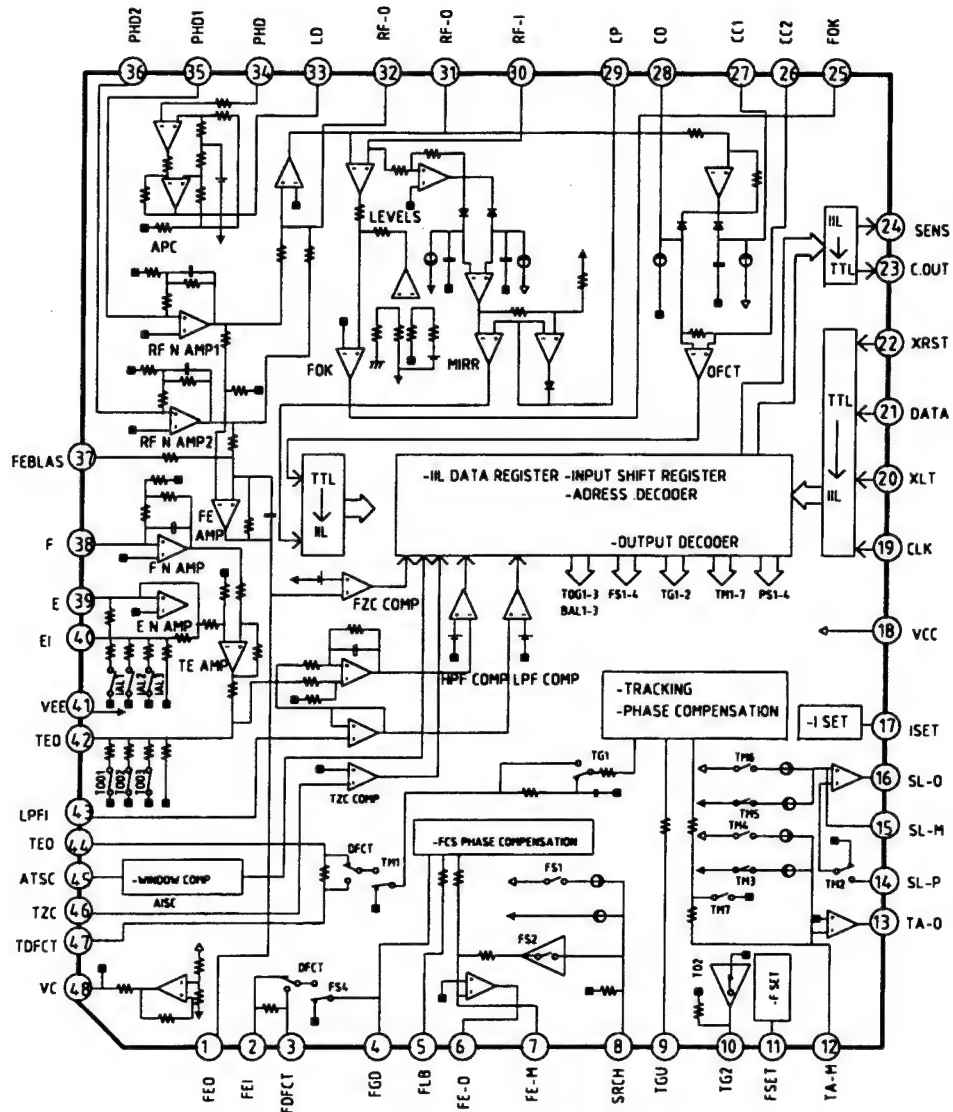
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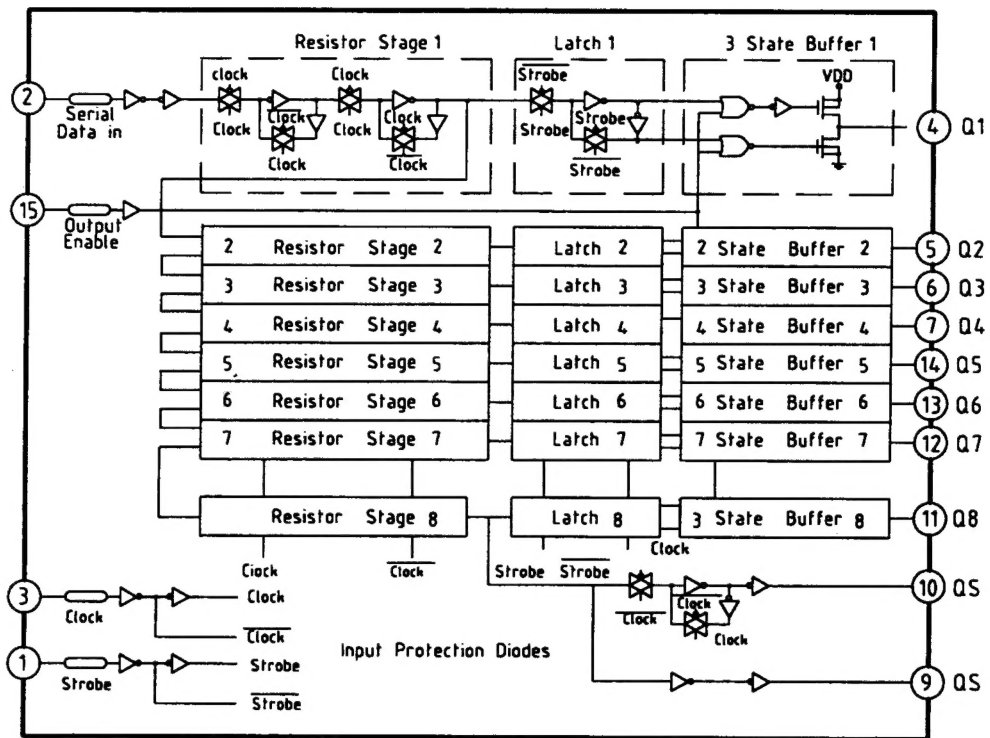
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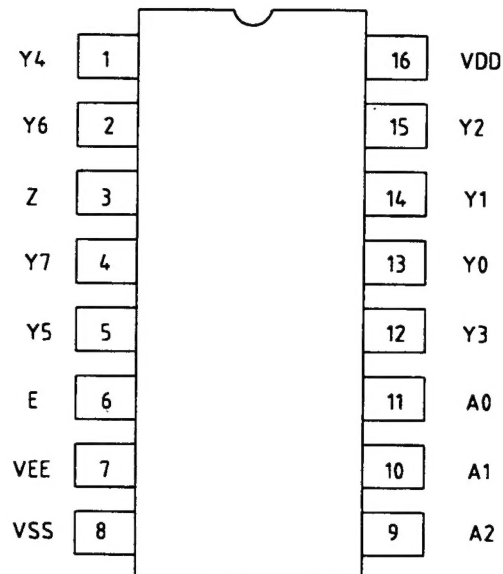
CXA 1782BQ : IC103



MC 14094BCP : IC201,IC202

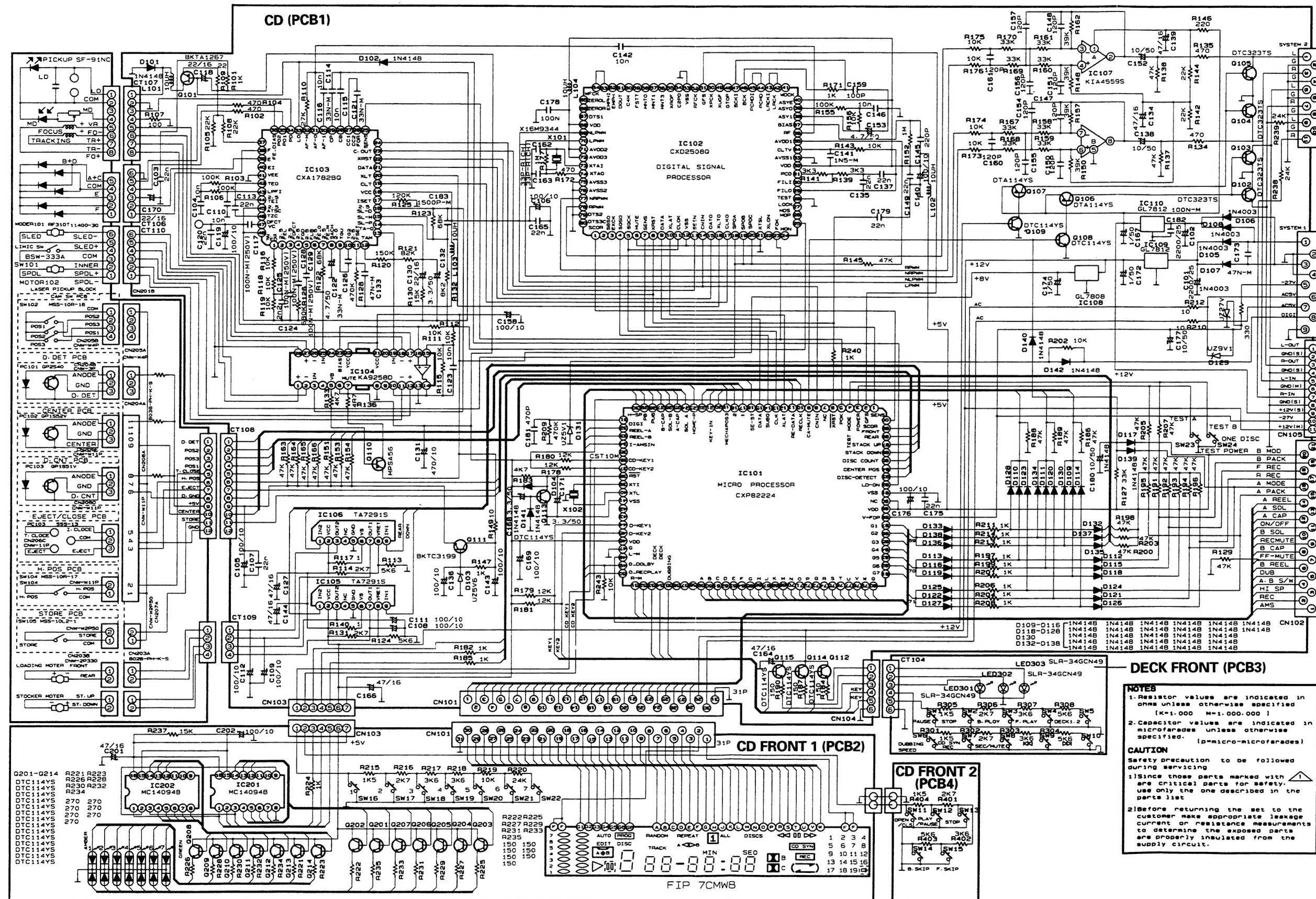


GD 4051B : IC503



SCHEMATIC DIAGRAM (I)

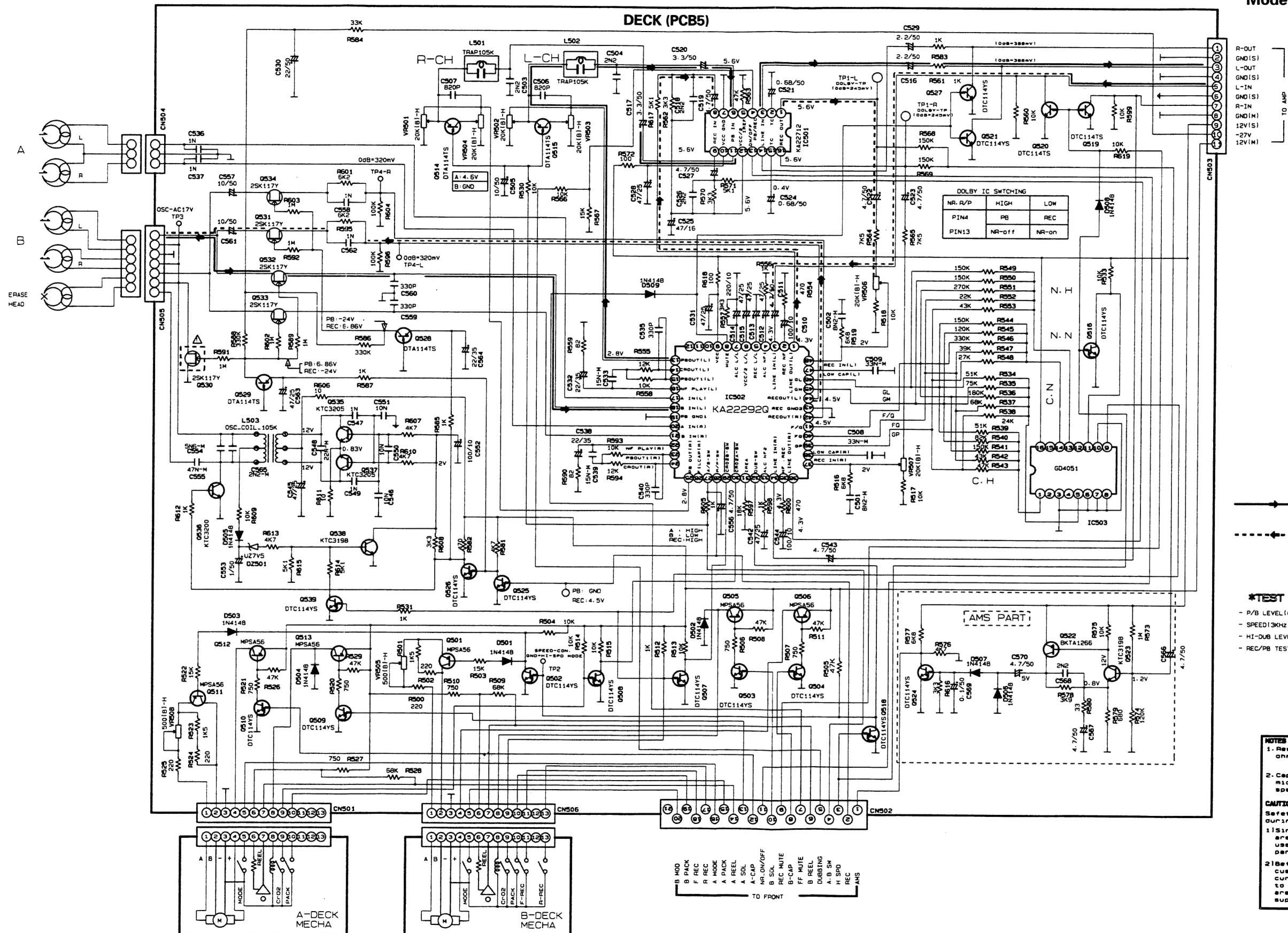
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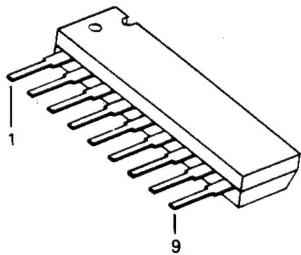
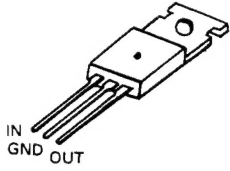
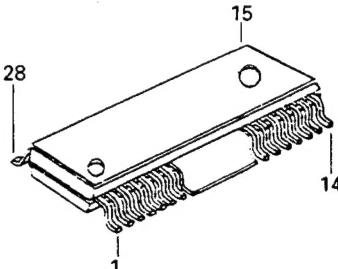
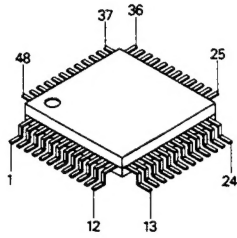
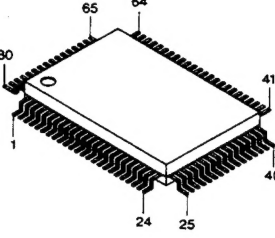
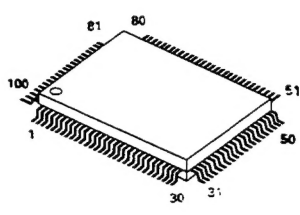
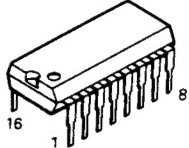
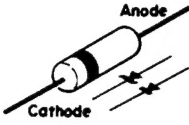
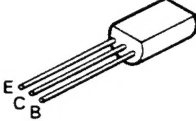
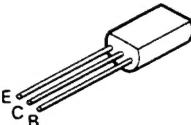
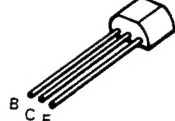
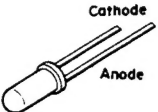
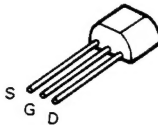
SCHEMATIC DIAGRAM (II)

Model No. : CCD-676

DECK (PCB5)



PIN CONNECTION DIAGRAM OF IC'S, TRANSISTORS AND DIODES.

<p>TA7291S KIA4559S/KIA75559S</p> 	<p>KA7808 KA7812</p> 	<p>KA9258D</p> 	
<p>CXA1782BQ KA22292Q</p> 	<p>CXD2508Q</p> 	<p>CXP82440</p> 	
<p>GD4051B KA22712</p> 	<p>ZENER IN4003 IN4148</p> 	<p>KTC3198/KTC1815 KTA1266/KTA1015Y KTC2240/BKTC3200</p> 	<p>MPSA56Y</p> 
<p>DTA114YS BKTC3199 DTC114YS BKTC1267Y DTC114TS DTA114TS DTC323TS</p> 	<p>SLR-34GCN49</p> 	<p>2SK117Y</p> 	<p>KTC2236A/KTC3205</p> 